REPEATER JOURNAL

NOVEMBER
1982

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REPEATER JOURNAL

CVRA-SouthEastern Repeater Association, Inc.

NOVEMBER, 1982 "IN OUR 11th YEAR" VOLUME 11, NO. 4

ORGANIZED 1971

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Editorial Comment

Two Important Things Coming Up . . .

Two important things will be happening between now and the end of the year. This is the year we elect new Directors and Vice-Directors, and secondly it is renewal time for ALL full members by December 31.

Each year we touch on these subjects. They both are important things because each has a lot to do with our growth potential for the next year or two. In order for our organization to remain strong, we need strong leaders . . . the Director and Vice-Directors are the leaders from each District. We need a majority of repeaters as full members to provide the necessary clout to enforce recommendations on frequency coordinations between repeater owners.

DIRECTOR/VICE-DIRECTOR ELECTIONS

This is the time of the year in which you as a Full Member have a voice in the organization. It is the time you can evaluate the job your Director and Vice-Director has done. It is a time you can have a part in getting either or both replaced and get someone in the position you feel can do a better job, or if you feel he had done a worthwhile job, you can show your support for him.

Continued On Page 12

Contest Is Over . . . We Done Good . . .

It was our first try at anything like this in CVRA-SERA history. A contest of such proportions that we felt, everyone would jump at the chance of $750 as prizes just for joining our organization.

We worked up a deal with Encomm, Inc. distributor of Santec Handhelds, worked with our great Dealer advertisers and with their complete cooperation, the contest was launched in the May Journal, even though we had been promoting it at hamfests since March. We decided to let anyone who had joined since February 1, be eligible.

We printed up 15,000 brochures and they were distributed over the five States by Directors, Vice-Directors, Dealers, anyone who would take a handful. I felt we couldn't lose. I was looking at a goal of at least 3,000 entries, over 1,000 new members.

Well we didn't quite make it. We were most successful, but still, I feel a little disappointed we didn't make the goal. Maybe we just didn't try hard enough.

We did get 2,038 entries, with about 664 of them new members (the rest were renewals).

Continued On Page 19

REPEATER JOURNAL

NOVEMBER 1982 – JANUARY 1983

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DIRECTORS - VICE DIRECTORS AND THEIR ASSISTANTS LISTED BY STATE ON BACK COVER

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SPECIAL NOTICE: Associate Membership deadlines are now on the 15th of the month preceding months of publication (Jan. 15, Apr. 15, July 15 and Oct. 15.) Persons joining or renewing must have their application into the Greensboro P.O. Box by those deadlines to receive the next upcoming Journal. Memberships received after deadline will not receive a REPEATER JOURNAL until the next issue comes out some 3 months later. Memberships received at hamfests will receive a current REPEATER JOURNAL as long as supplies are available.

The CVRA REPEATER JOURNAL is published quarterly, during the months of February, May, August and November of each year and mailed free to members of CVRA-Southeastern Repeater Association, Inc., a non-profit coordinating organization made up of repeater owners and users. Permission is granted for use of REPEATER JOURNAL material providing credit is given. The REPEATER JOURNAL will swap newsletters with other Repeater Councils and News organizations on request. The REPEATER JOURNAL press run is 4,300 copies with circulation in excess of 3,800 copies and is entered as Third Class Mail at the Post Office in Greensboro, N.C. All news and Newsletter exchanges should be mailed to the Editor and Publisher, Wayne C. Williams, K4MOB, 600 Lakedale Road, Colfax, N.C. 27235.

DIRECTOR AND VICE DIRECTOR ELECTIONS

According to the CVRA-SERA Bylaws and Constitution, we have before us the task of electing new Directors and Vice-Directors to serve the calendar years of 1983-1984. President Don Morris named nominating committees from each of the five Districts to submit nominations for the two offices for each District.

After publishing the nominations in this issue of the Journal, we will wait to see if any nominations "from the floor" are received. A nominating form is printed in the Journal for anyone desiring to make such a nomination. This nomination must be in the hands of the Secretary no later than noon November 30th, 1982. The Nominating committee will be naming only one person for each office in each District. If NO OTHER nominations are received by the Secretary, the Committee's nominations will be proclaimed elected.

If any valid nominations are received from the Full Membership, the Secretary will mail ballots to every Full Member on record in the District affected by the additional nomination. The ballots must be returned to the Secretary no later than December 10.

We are fortunate that most of our old Directors and Vice-Directors accepted nomination for a second term. They will automatically be elected if no one sends in any additional nominees by the Nov. 30th deadline.

NORTH CAROLINA

KEN WOODARD, WA4BVW of Canton, and CALVIN DEMPSEY, WA4UQC of Tarboro have been nominated for reelection and have accepted the nomination. Calvin is closing his first term as Vice-Director while Ken after an absence of a year is closing his 2nd term as Director. Both have shown a willingness to continue leading CVRA-SERA in North Carolina.

VIRGINIA

MIKE WILLIAMS, KC4AO of Danville has accepted nomination for a second term for the "Old Dominion" District. The nominating committee has nominated Lee McDaniel WB4QOJ of Roanoke as Vice-Director. Mike is concluding his first two-year term as Virginia Director, Lee, who has worked and helped promote CVRA-SERA over the past few years, has volunteered to try for the office of Vice-Director of Virginia.

TENNESSEE

SAM KIRBY, WB4HAP of Corryton, charter Director of Tennessee has agreed to accept another nomination for upcoming term of Director. Sam was named Tennessee's first Director as they joined the ranks of CVRA-SERA in late 1979.

TOM PARK, WD4KWP of Gallatin has accepted the nomination of Vice-Director. Tom, 27 has been licensed for 5 years. Tom said from the beginning his main interest has been repeaters, their operation and construction. He feels strong coordination policies and communication is necessary to combat interference between repeaters.

WEST VIRGINIA

A recent change in Directorship in West Virginia will continue if no one objects, reports the nominating committee there. CVRA-SERA bylaws do not prohibit co-vice-directors so this condition will continue in this District.

TED WOLFE, WD4KHL of Cabin Creek who was unamiously nominated by the West Virginia Radio Council and approved by CVRA-SERA to take over as Director in late Summer, has been nominated to serve an additional two-year term. His two Vice Directors, MIKE PALMER, K8LG of Morgantown and KARL MORRIS, WB8GDY of St. Albans have accepted nominations to assist as co-vice-directors in the Northern and Southern portions of the State respectively.

SOUTH CAROLINA

As of press time, unfortunately the Repeater Journal was unable to obtain any nominating information about the South Carolina District. Director AL HARNEY, N4EOY of Columbia or Vice-Director GARRY M. BARNETTE, WA4MDP of Summerville have not indicated whether they will accept an additional nomination or whether anyone new has or will be nominated.

The Repeater Journal Editor apologizes to our South Carolina membership for being unable to obtain any information concerning your District's elections, even after several inquiries and attempts.

YOUR FULL MEMBERSHIP DUTY

You as Full Members of CVRA-SERA are charged with the responsibility of seeing that the best possible people are chosen to lead your District. Our bands are filling up, clear frequency spectrum is becoming rare and more repeaters are going on every day. You need good men who will take the time to work for you, communicate with you and keep your repeaters clear and interference free.

The Greensboro Amateur Radio Club

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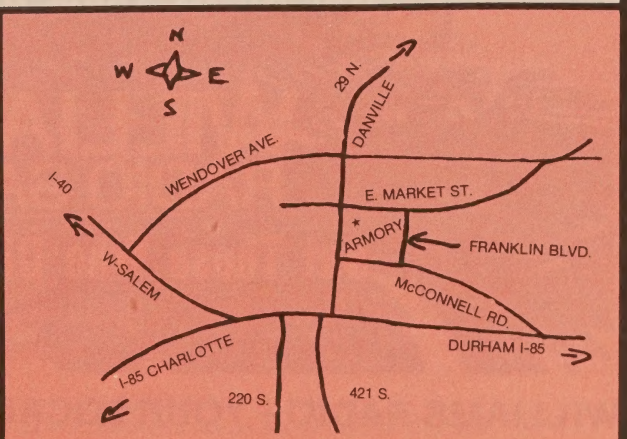

CVRA-SERA ASSOCIATE MEMBERSHIP

After an affirmative vote at the Annual Shelby meeting, President Don Morris said CVRA-SERA Associate Membership dues would rise from $3.00 per year to $4.00 per year effective January 1, 1983.

The Board of Directors voted the increase, the first in almost five years after hearing an expanded report of operations and future expense estimates by Ray Adams, Treasurer.

Briefly Adams, who is a CPA, highly recommended the dues increase because of increases in spending due to inflation over the past 4 years and expected continued higher costs of operation in the future.

"The Four dollar a year dues is a realistic figure we can stay solvent for several years and live with," Adams told the Directors. Adams also recommended leaving the Full Membership dues at $8.00 per year, which the Directors also voted in the affirmative.

Associate Membership chairman Larry McLaurin will accept full years Associate memberships at $3.00 until December 31. After that date, only $4.00 payments will be credited a full year. He said they will credit $3.00 membership payments which arrive after January 1, for only 9 months, instead of the full year.

Associate Membership in CVRA-SERA is for Repeater users or any other Amateur interested in supporting the organization. They have no voting priveleges, can hold Appointive offices and Committee posts, and of course receive the Repeater Journal.

Full Membership is limited to repeater owners and consists of two persons named on the application presented with the $8.00 fee. In return, the named repeater(s) are listed as Full Members of the organization. The two representatives named are Full Member representatives of the repeater(s) and have full voting priveleges. Full Members may hold offices such as President or Director. Both receive the Journal.

IS THIS YOUR LAST JOURNAL?

Be sure to check you mailing label to be sure your membership is not expiring with this issue of the Repeater Journal. Your expiration date is printed in the right side of the label. Don't miss a single issue, if time has come, send in your renewal right away before you forget.

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CVRA-SERA DIRECTOR / VICE-DIRECTOR NOMINATION FORM

To CVRA-SERA Secretary:

The below named person(s) are nominated to office(s) listed below. The persons nominated have been contacted and have expressed a desire to serve if elected. The nominee is a FULL MEMBER of CVRA-SERA and is eligible to hold office in the organization. It is understood that this nomination from the floor, signed by myself and three other full members will be added to the nominating committee's list of nominees. If this nomination is the only one submitted for this office, that person shall be elected to the office. If more than one is nominated for any one office, an election will be held by written ballots mailed to every full member of CVRA-SERA.

Office person is nominated for _____
(Director or Vice-Director)

If more than one nominee, use xeroxed copy or simular sheet of paper.

Name of nominee _____ Call _____

Address _____ Phone _____

Is A representative of _____ repeater (a full member)
(Call-City-Freq)

Person has been contacted and has agreed to serve to best of his ability if elected to the office nominated ( ) Yes

Include brief Biographical sketch of nominee and his achievements in Amateur Radio and /or CVRA-SERA. (Use separate sheet of paper)

This nomination certified by me _____ Call _____

member of repeater _____, a full member of CVRA-SERA.

Three other full members:

_____ call _____ repeater _____

_____ call _____ repeater _____

_____ call _____ repeater _____

Other full members must sign their signature personally.

Mail This form with attached biography to arrive No later than November 30, 1982 to:
MAXINE BARRETT, CVRA-SERA SECRETARY, BOX 212, HICKORY RD., LOOKOUT MT., TN. 37350

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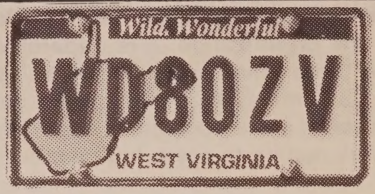
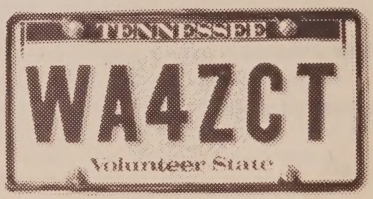
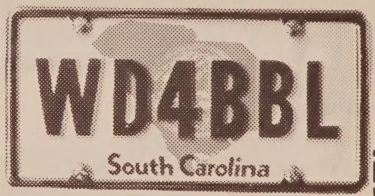


STYLE W. VA.



STYLE TN.

STYLE N.C.



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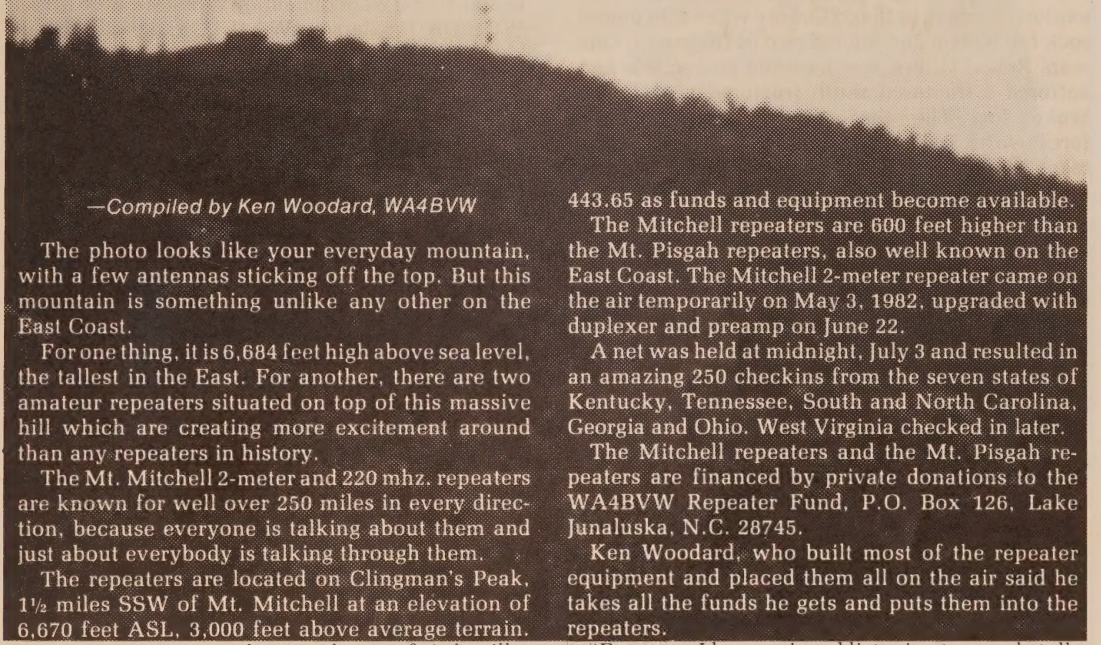


—Compiled by Ken Woodard, WA4BVW

The photo looks like your everyday mountain, with a few antennas sticking off the top. But this mountain is something unlike any other on the East Coast.

For one thing, it is 6,684 feet high above sea level, the tallest in the East. For another, there are two amateur repeaters situated on top of this massive hill which are creating more excitement around than any repeaters in history.

The Mt. Mitchell 2-meter and 220 mhz. repeaters are known for well over 250 miles in every direction, because everyone is talking about them and just about everybody is talking through them.

The repeaters are located on Clingman's Peak, 1½ miles SSW of Mt. Mitchell at an elevation of 6,670 feet ASL, 3,000 feet above average terrain. The repeater is 25 miles Northeast of Asheville, N.C. 110 miles Northwest of Charlotte, N.C.

The repeater antennas are situated on an 180 foot tower, which is 83 feet taller than Mt. Mitchell proper. Clingmans Peak is 65 miles East Northeast of Clingman's Dome, which is in Tennessee.

The 2-meter repeater is operating on 59-19 sub band with an ERP of 20 watts, to be upgrades to hear 100 watts, ERP. The receiver is an SCR 100 Spectrum, with a Lunar GAS-FET preamp. The antenna will soon be a Phelps Dodge PD-200 Stationmaster with a Phelps Dodge 6-cavity duplexer. Transmitter is a Spectrum SCT-110. Both transmitter and receiver are borrowed from the Haywood County 87-27 repeater group.

The 220 mhz repeater at the same location operates on 222.94-224.54, with an ERP of 14 watts, which will also be upgraded as funds become available.

A 450 mhz repeater is also planned on 448.65-443.65 as funds and equipment become available.

The Mitchell repeaters are 600 feet higher than the Mt. Pisgah repeaters, also well known on the East Coast. The Mitchell 2-meter repeater came on the air temporarily on May 3, 1982, upgraded with duplexer and preamp on June 22.

A net was held at midnight, July 3 and resulted in an amazing 250 checkins from the seven states of Kentucky, Tennessee, South and North Carolina, Georgia and Ohio. West Virginia checked in later.

The Mitchell repeaters and the Mt. Pisgah repeaters are financed by private donations to the WA4BVW Repeater Fund, P.O. Box 126, Lake Junaluska, N.C. 28745.

Ken Woodard, who built most of the repeater equipment and placed them all on the air said he takes all the funds he gets and puts them into the repeaters.

"For years I have enjoyed listening to people talk long range over my Pisgah machines", said Ken, "Now we have something going that someday, when funds become available, will be the most far reaching repeater on the East coast."

COVERAGE: Normal coverage of Mt. Mitchell is 200 miles with present output. Upgrading to 1090 watts ERP will depend on interference possibilities from the WB4ULJ repeater on Pine Mt., 250 miles to the South West in Georgia. Ken said he naturally wanted to co-exist with the Georgia 59-19 machine.

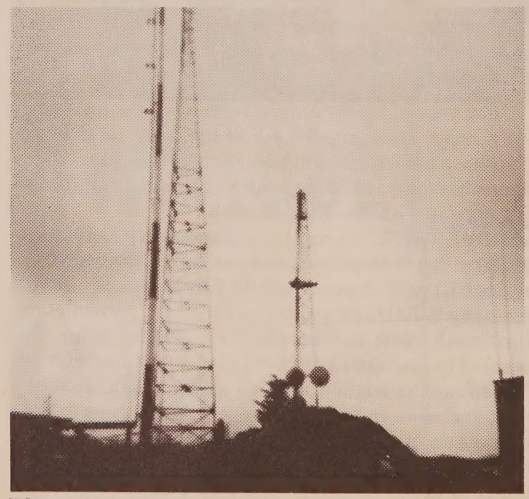
Ken said he wished to thank all the operators who are courteous and allow breakers, and others to use this repeater which handles heavy traffic day and night with its vast coverage. He also wished to thank so many who had contributed in the Repeater fund to get the machines going, and thanks to Lon Woodard, WB4UWZ, and Edna Edwards, Chief Engineer and Manager respectively of WMIT and WFGW of Black Mt., N.C.

NEW RIVER VALLEY AMATEURS ASSIST IN CAVE RESCUE

—by Seth Williams, WB4WQY

New River Valley amateur radio operators proved recently that they can respond quickly and efficiently to an emergency when two Virginia Tech cavers were injured in an underground accident. On Saturday, April 17, at 5:15 PM, a 4-man expedition from the Virginia Tech Cave Club was exploring a cave in Bland County when a 30 pound rock fell 90 feet and injured two of the group. One man, Robert Ulfers, was knocked unconcious and suffered a fractured skull, fractured neck and a broken foot. The other man, Pete Sauvigne, suffered two broken arms. An uninjured member of the team climbed out of the cave and summoned the Virginia Tech Cave Club.

ROAD LEADING to the top of Mt. Mitchell, home of the 59-19 Mitchell repeater. The towers can be seen on the peak near the middle of the picture.



TOWERS ON THE TOP of Clingman's Peak of Mt. Mitchell. The far tower to the right is home of the fabulous Mitchell Amateur repeaters. The 180 foot tower is 83 feet taller than Mt. Mitchell, the highest peak on the Eastern part of the United States.

Gene Harrison, WB4NGC notified Blacksburg amateurs via the Brush Mountain repeater that he was on his way to the accident scene. Within 15 minutes, members of the Virginia Tech Amateur Radio Association set up an emergency response center in the club station – K4KDJ. Manning the center at first were Jim Talley WB20MZ, Rob Miller WB4FDB, Jim Parsons WA4LTO and Paul Harouff KA4ZOI.

When WB4NGC and the rescue personnel arrived at the cave, they determined that experienced cavers would be needed to assist in the rescue. Unfortunately, the squads discovered that neither the Bland County repeater or the Brush Mountain machine were sufficient for reliable communications from the accident site. John Smith N4AZL of Pearisburg, who was able to hear both repeaters from his Giles County location, monitored both frequencies and relayed information until an 11-element beam was set up in Blacksburg. Tom Mallory N4AZJ, caretaker of the Bland County machine and EC of Bland County, supervised communications from Bland.

A number of other New River Valley amateurs assisted during the 16 hour rescue mission, including Bill Davis AB9I (EC Montgomery Co.), Chuck Rexroad WD4LNN (Assistant EC Montgomery Co.) and Dave Williamson WA4QVE, who monitored the frequency while delivering pizzas in Blacksburg. Also standing by were Bill Lineberry WB4TGT and Ray Fletcher WD4MUQ.

After midnight the VTARA emergency response center was moved to the center set up by the Tech Cave Club, where WB20MZ, WB4FDB, WA4LTO and KA4ZOI worked through the night. Within minutes the club had assembled a base station, beam antenna, several 2-meter handhelds and a police/emergency scanner. Thanks to the dedication of these operators and N4AZJ in Bland, experienced cavers from Virginia, West Virginia and Tennessee were summoned to the rescue site. Ulfers was placed aboard a rescue helicopter at 9 AM Sunday morning, 16 hours after the accident, with Sauvigne being transported by ambulance thirty minutes later. Sauvigne was released the following day; Ulfers is reported to be recovering rapidly from his ordeal.

As a direct result of the role played by the Virginia Tech Amateur Radio Association operators and other local amateurs, the Virginia Tech Cave Club has voted to have an ARES member accompany all future cave rescue operations.

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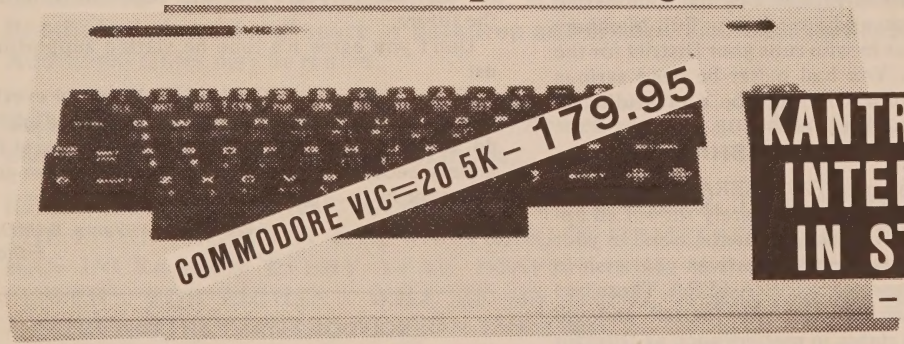

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Editorial Comment

TWO THINGS TO DO

Continued From Page 1

Directors and Vice-Directors serve two year terms. Your current leaders will end their current term on December 31, 1982. By that time they will have been re-elected, or a new replacement has been named. Whoever is the successor will begin their 2-year term on January 1, 1983.

Elsewhere in this issue, you will find the story naming Directors and Vice-Directors who have been nominated or renominated for the new term. You will also find a full page nomination form enabling you as a Full Member to voice your nomination if you desire. According to CVRA-SERA bylaws, these nominations from the "floor" are necessary and must be in the hands of the Secretary by November 30, 1982. Remember whoever you nominate must be a Full Member, and your nominations must be signed by three other Full Members besides yourself.

I urge you to use this occasion to voice your approval or disapproval for this very important office. The Director and Vice-Director is the CVRA-SERA in your District. They are absolute rulers as far as the organization is concerned. You need good men who don't mind working. It's up to you to see that you get them, we cannot dictate who is elected in your District, only your District Nominating Committee or you and your fellow Full Members have any sayso as to who runs your District for the next two years. You had better be dead serious when you think of who he might be, a lot is riding on him . . . and you.

FULL MEMBERSHIP

Full Membership in CVRA-SERA is a very simple task to accomplish. You merely fill out an application if you are a repeater owner, send in your $8.00 and name two representatives you wish to represent your repeater to CVRA-SERA. These two persons will receive the Repeater Journal, and will have full voting rights in matters such as Director and Officer election.

Each year we pick up dozens of new Full Member repeaters who join for the first time. Sadly, we lose a lot who have been with us for a while. I am convinced that it isn't they are tired of us, they just forgot.

If we had the time to write or call every one of them, one at a time, I am convinced we would have 100% representation. But you and I know that is impossible. So we have helpers who write, we send out renewals once a year, we push and talk about it in the Journal, and many still forget.

What's the answer then?

Actually you Associate Members, who are users of the repeaters in our five states can do much to get repeater owners to join or renew. You yourself must think something of CVRA-SERA, or you wouldn't be reading this right now.

So why shouldn't your home repeater support the organization. You do, you also support your home repeater. I urge you repeater users to watch the repeater indexes in the Journal, see that your home repeaters join. Remind them, talk to them, tell them, urge them, call them, or do whatever you can to convince them of the value of supporting a frequency coordinating organization.

There are many repeaters around that have NEVER joined CVRA-SERA. But if they would stop to think a moment and notice how little problem there is with interference in our part of the country, how well coordinated the repeaters are and how adjacent channels and co-channels are spaced as much as possible to prevent problems.

My fellow Amateur, none of this was an accident. It is a result of over 11 years of hard work, coordination, communications, support and cooperation. The CVRA-SERA claims credit for this.

So whether your home repeater joins as a full member or not, we are working for him as we have for the past 11 years and will continue to do in the future.

Don't you agree it's time he started supporting us!

Not everyone likes CVRA-SERA, as not everyone likes ARRL, but each organization has a job to do, and they are doing the very best they can at it, mainly because it's the best and only thing we got going for us . . . right??

—Wayne C. Williams, K4MOB
Editor

YOU DON't WANT AN UGLY "N"

Repeater owners! If you have that "Ugly N" beside your repeater listing in our repeater index . . . you can get it removed easily. Just join CVRA-SERA as a Full Member for 1983. We'll send you an application, if you'll send the Editor your name and address.

You join, we'll remove the "N". If you don't join, we won't remove the "N", but we WILL continue trying to keep your frequency clear. That's our job, with or without your support, "N" or not!

Frostfest '83

Winter Amateur Radio & Computer Show

Richmond, Va.

Sunday, Jan. 16, 1983 8 a.m. - 4 p.m.

Virginia State Fairgrounds

Better Living Exhibition Bldg.

GENERAL ADMISSION..... $4.00
(children under 12 free with adult)

BOOTHS FOR COMMERCIAL EXHIBITORS
FLEA MARKET SPACES (w/o tables) 8'..... $3.00
(Tables may be rented - $3.50: Chairs - $1.00)

Flea Market Exhibitors must purchase general admission tickets.

MANY DOOR PRIZES - HF TRANSCEIVER — MINI COMPUTER - EXTRA PRIZES FOR FLEA MARKET EXHIBITORS.

Paid up Flea Market Reservations accepted until Jan. 11.
Commercial Exhibitors deadline - Dec. 29. Write or call for prices and booth locations. Booths include backwall space or backdrop and divider. One table and chair per space. Additional tables may be rented.

Building will be available Saturday - noon. Armed security guard all night. Trucks may unload in the building until 11 p.m. Saturday.

REMEMBER - THE LAST HAMFEST IS IN OCTOBER. THIS IS THE FIRST OF THE YEAR - AHEAD OF A LONG STRING OF HAMFESTS. OUR ATTENDANCE HAS INCREASED EVERY YEAR DESPITE THE WEATHER. EMERGENCY POWER - FOR LIGHTS - WILL BE ON HAND. A BETTER PA SYSTEM IS ASSURED. THE SUPERBOWL IS ON THE 23RD.

For additional information call Bill Scruggs
N4DDM 804-272-8206 after 6 p.m.
or write
Richmond Frostfest
Post Office Box 1070
Richmond, Virginia 23208

Talk-in or Information 146.28/88 - 146.34/94

ROHN TOWERS AND ACCESSORIES

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We also have flat and sleeved top sections, thrust bearings, House brackets, short Base Sections, rotor plates, Guy assemblies, 3/16 EHS Guy wire, cable clamps, turnbuckles and other items.

ROHN TOP SECTIONS

If you have a 25-G Rohn Tower at the height you want, and do not have a top section, we have the new ROHN BAS-25-G cap section. It has a flat top, drilled for TB-3 bearing and a welded-in rotor plate. Length 20-inches.

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Aluminum mast — 2-in. OD 6061 tubing with ¼-in. wall.
12-foot lengths, 19 lbs — IN Stock
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Touch-up rust spots on your tower and antenna bolts with RUST-OLEUM, Cold Galvanizing.

Large 20-oz. Industrial spray can $5.10
Mosley Penetrox grease — $1.29
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15 oz. – Will do 50-100 Connections . . . $7.90
(Previously advertised for $24.00)

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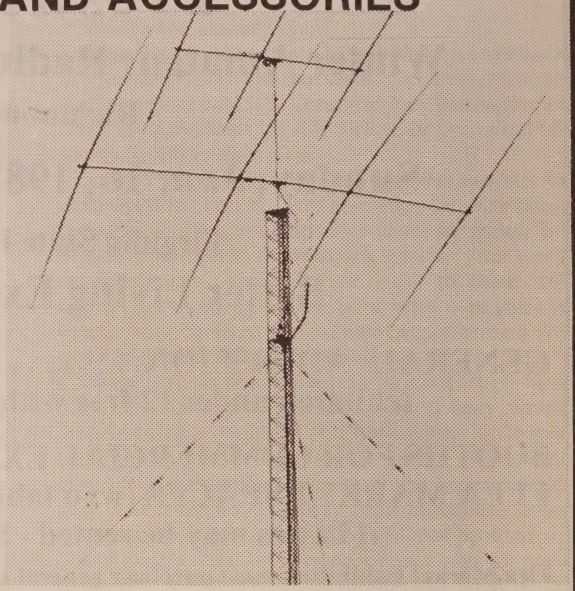
25-ft. Kit $15.50
50-ft. Kit $22.25
100-ft. Kit $32.15



We can also supply ½ and 7/8" hard line in aluminum or copper. We also have a limited stock of hard line connectors. If we do not have the connectors you need, they can be supplied within approximately ten days.

If you want or need something not listed above, call us, we may have it or can get it for you. All of the above items are standard stock items and we will try to fill your order promptly. We have a limited variety of utility pole hardware and can supply utility poles in the Greensboro, N. C. area only. Call us if you have a problem, we will design a system for you.

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HARWOOD WEST, WB4RLO

CONFLICTING HAMFEST DATES SEEM AHEAD AGAIN IN '83

—by Wayne C. Williams, K4MOB

Unless we hear different, there will be at least 3 conflicting hamfest dates in CVRA-SERA territory again this year.

If Tri-Cities, Tn. holds their hamfest on the weekend of April 30, they will again clash with Greenville, S.C. which has scheduled for that weekend. We hear rumors Tri-Cities may move their date.

Both Asheville, N.C. and Virginia Beach, Va. have confirmed their 1983 date on the 2nd weekend of October. Since Va. Beach is locked in with the "Pavillion" Civic Center on that date, and Asheville keys for the leaf turning in the mountains, it's unlikely either of these will be changed. Asheville has held this weekend for 7 years now.

Perhaps the most surprising change was the announcement by Orlando, Fla. moving ahead one week, to butt heads with the Charlotte, N.C. hamfest. Charlotte remains on the same week of previous years, the 19th and 20th of March for 1983. The main problem with this move by Orlando is that they and Charlotte are major events, both draw heavy on Manufacturers and the large National dealers. Booth prices may make the difference, both hamfests went up, but Orlando went considerably higher than Charlotte. Still, it will hurt both shows. Manufacturers and major dealers won't attend both.

Perhaps after their clash with Charlotte this year, Orlando might try butting heads with someone else next year . . . we hope so anyway.

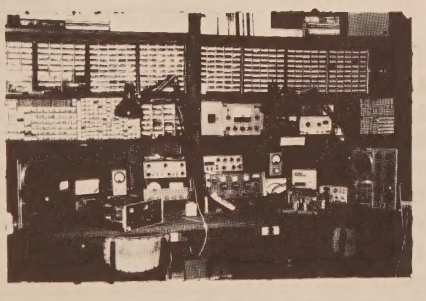
SAY YOU SAW IT IN THE JOURNAL

When you make that next equipment purchase, tell your dealer you saw his ad in the Repeater Journal. Let them know you support their advertising in our publication.

Your Repeater Journal advertisers are local, they support your clubs, repeaters, and organizations. Support them . . . buy locally!

REPEATER MEMBERSHIPS EXPIRE DEC. 31

All full members of CVRA-SERA should remember their memberships expire on December 31. When your renewal application comes in the mail in late November, fill it out and send it back immediately before you forget. Don't forget to list two representatives, who will receive the Repeater Journal.



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145.35 REPEATER UPDATE

—by Murray Adams, WA4DAN

As mentioned in the August issue, Greenville, N.C. has another fine two meter repeater. The frequency is 145.35 minus 600 KHz. Basically the repeater has the same characteristics of the old 147.09 Greenville machine. The .35 repeater is utilizing the old .09 Phelps Dodge Superstationmaster antenna at 766 feet for receive, but a new Hustler G7-144 antenna has replaced the old G-6 at 660 feet for transmit. The G-6 was beginning to show its age so it was replaced.

In addition to the Hustler G-7 antenna, several other new pieces of equipment have been added to the machine. To the Hamtronics receiver the following periphery items were installed: Piezo Technology Crystal Filter, PolyPhaser Corporation Impulse Suppressor and a 20 db pre-amp built by Macon, WB4PMQ. On the transmit side the new equipment includes an Astron RS-20M power supply and a 50 watt solid state power amplifier.

All the repeater equipment is installed in a recently acquired Motorola rach which makes for a neat and orderly installation. The .35 repeater rack is physically along side the .09 rack in the engineers shop at the WNCT-TV studio. The room is temperature and humidity controlled which makes for an ideal location.

The overall range is much like the old .09 machine. As with the .09 machine, the .35 repeater is receiving much better than it is transmitting. So if you can hear it, you can work into it with a good signal. Our immediate plans are to improve the transmit range. Our receive transmission line is already two-thirds 3⅛" copper. Our transmit line is 750 feet of ⅞" hardlinne which means we have approximately 5 db loss so therefore not much power is getting to the antenna. There is a good chance we can connect into the existing spare 3⅛" rigid copper RCA feedline. This line has only .13 db loss per hundred feet! If that happens we will triple the power getting to the antenna. In order to accomplish this and other projects for the repeater, a fund raising drive is under way to raise the funds necessary to purchase two RCA flanged reducer cones. Being copper, they are very expensive. Anyone wishing to make a contribution of any amount can send donations in care of the Pitt County Repeater Association. The address is: PCRA, P.O. Box 873, Greenville, North Carolina 27834.

Our goal for the spring or summer of 1983 is to be able to replace the G-7 transmit antenna with a new Phelps Dodge #340 dipole array and move up to the 700 foot level on the tower.

The line of sight and radio horizon are 36 and 48 miles respectively from our transmit site at 660 feet. Our tests indicate that we are getting 40 to 50 mile mobile coverage except in the shadow of the tower to the Northeast.

As with any repeater, alot of hard work, time, and money have gone into making this repeater possible. The people who have worked on the repeater are: Macon Dail, WB4PMQ; Heber Adams, W4GDF; Murray Adams, WA4DAN; Roy Becker; Tommy Forrest, N4GVK; and Bernie Nobles, WA4MOK.

145.35 FACTS

Repeater: Hamtronics receiver; VHF Engineering transmitter
Antennas: Receive – Phelps Dodge Superstationmaster
Transmit – Hustler G7-144
ERP: 40 Watts
HAAT: Receive: 766 feet
Transmit: 660 feet
AMSL: Receive: 836 feet
Transmit: 730 feet

SERA FINANCIAL REPORT AS OF SEPTEMBER 30, 1982

REVENUES		
Advertising		$ 3,756.45
Associate Membership dues		8,204.00
Full Membership dues		887.00
Other		336.46
		$13,183.91
EXPENDITURES		
Journal mailing	$ 979.47	
Journal printing	9,446.80	
Miscellaneous expenses	318.63	
Director's meetings	726.81	
Office expenses	116.44	
Postage-other than Journal	317.82	
Printing-other than Journal	666.03	
Telephone	388.45	12,960.45
EXCESS OF REVENUES OVER EXPENDITURES		$ 223.46
Balances, January 1, 1982		
Expenses advanced	$ 700.00	
Cash in bank	3,468.92	4,014.92
EQUITY TO ACCOUNT FOR		$ 4,238.37
Less: Expenses advanced	$ 700.00	
Invested in Copy Machine	2,240.00	2,940.00
CASH IN BANK		$ 1,298.37

Ray Adams, N4BAQ, Treasurer

The ARRL – Change for the Better

Steve Kercel, AA 4AK
Assistant Director, Delta Division

Given the length of time that it usually takes to effect change in a big organization, it is astonishing that real and sweeping change is overtaking the ARRL as quickly as it is. Consider, only a year ago the Directors of the League "accepted" the Phase 2 Long Range Planning Report. Some changes are in place already. More importantly, two changes that affect the day-to-day operations of the average amateur will go into effect very soon. Never has an unresponsive bureaucracy responded so quickly in the past.

Both changes are designed to greatly help the amateur community to effectively respond to the real problems with which we have to deal. Consider what our problems are: repeater jammers, CATVI, and anti-amateur city ordinances are typical examples. Our real problems have some important points in common. First, they are too big for one person to handle. Nevertheless, they are local in character and must be settled on the scene. Finally, they are too numerous for a centralized organization to deal with them. The current problems of amateur radio must be settled by strong, well informed organizations at the local level. The reorganization of the League is being done to make sure that this happens.

Since the forces presently arrayed against amateur radio are local in nature, the obvious first line of defense is the local amateur radio organization. With this in mind, there will be a total revamping of the affiliate club system. In addition to the usual ARRL affiliation status, there will be a new kind of affiliation, the special services clubs. The name is self-explanatory; the special services clubs will perform special services for the entire amateur radio community, such as combatting interference problems and assuring that amateur radio gets good publicity in the media. The special services clubs will be given assistance by the section level and national level ARRL organizations in carrying out these functions. They will, in effect, become the local arm of the ARRL.

In a country as big as ours, it is not practical for a central office to deal directly with local organizations. There are over two thousand ARRL-affiliated clubs, and it is expected that ten percent of these will opt for special services affiliation. ARRL Headquarters staff has a little over a hundred employees. Thus is would be impossible for Headquarters staff to meet the needs of each and every affiliated club. In addition, many activities of amateur radio, such as traffic and coordination of emergency communications are most effectively done on a state-wide level. All these considerations point to the need for a well entrenched amateur radio organization at the state-wide level.

Indeed, this is exactly the purpose of the new section level organization. At the head of the organization will be the Section Manager. He will be the final buck stopper for the various problems that crop up in his section. These responsibilities are considerably broader than those of the present SCM who is primarily concerned with traffic and emergency communications. Most of the traditional responsibilities of the SCM will be delegated to assistants. The Section Manager will have eight assistants to help him carry out his job. Each assistant will head up a section-wide organization in a given specialty. For example, the Official

Continued On Next Page

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ARRL – CHANGE FOR THE BETTER

Continued From Page 17

Observer co-ordinator will be responsible for all Official Observers in his section.

At this point, the curious reader may be asking: "Why do these people do it? Why would a club want to go to the trouble of becoming a special services club? Why would an individual be willing to sacrifice some of his operating time to fulfill the responsibilities of a section-level appointment?" Certainly, it is not for the money; all appointed and elected ARRL officials are unpaid volunteers. Individuals and local clubs are willing to take on these responsibilities because they know that, if they do not, the jobs will do undone. The sheer satisfaction of fulfilling the need is what motivates those who volunteer for a place in the League organization.

Another question people ask is this: "Will it really make a difference?" This can be answered by another question: "How much do you want it to make a difference?" The changes in the League will only be as good as the people who put them into place, and those people are US, the individual members. We are the ARRL, and we, with the help of our small and underpaid staff, will solve the problems facing amateur radio. However, the new organization will only work if the people at the local level care enough to make it work.

The other question that commonly occurs is: "When will it happen?" It will happen very soon. The new section-level organization goes into place in January. The section managers are already looking for volunteers to take appointments. The special service club affiliation program will probably go into effect in March of 1983. If your club is interested, it is not too soon to be talking about it now.

No doubt many readers are asking: "What can I do?" The individual is critically important to the new scheme. The most important thing the individual needs to do is to be a member of the local amateur radio club, encourage it to obtain special service affiliation, and participate in its activities. Beyond this, one may volunteer for any of the multitude of section-level appointments that will be available under the new setup. If you want more information, contact your Section Manager, listed on page 8 of all editions of **QST.** One word of caution, the burden of the initiative rests on the individual. You can most likely have any part you wish in the new League organization, but you must take the first step. The new organization will succeed only if we participate in it.

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THE GREENSBORO ARC completed their fall "Fox Hunt" in October, with Dan Hopkins, AB4L of Collinsville, Va. finding the hidden transmitter first. Dan was presented a nice gold cup trophy and a Greater Greensboro Hamfest Tee Shirt for his effort. The presentation was made by Keith Gleason, WD4PZQ of the North Carolina club. Keith manned the hidden transmitter some 2 hours before it was found.

NORTH CAROLINA QSO PARTY

The Alamance Amateur Radio Club, K4EG will sponsor the North Caorlina QSO Party 13-15 November. Operating times will be 1700Z, 13 November to 0200Z, 15 November.

Exchange: Exchange signal report and QTH (county for North Carolina stations, ARRL section for others). No crossbands or repeater QSO's.

Suggested frequencies: *Phone* — 3.980, 7.280, 14.280, 21.380 and 28.580; *CW* — 60 kHz up from lower band end edge; *Novices* — 20 kHz up from lower band edge.

Scoring: North Carolina stations count 1 point per QSO and multiply by sum of ARRL sections. Others count 2 points per North Carolina QSO and multiply by total of North Carolina counties worked. Bonus of 25 points for working club stations K4EG.

Awards: The top scorer in and out of state will receive a 1983 Callbook of their choice. Top scorers in each ARRL section will receive certificates.

Mail logs by 13 December (large SASE for results) to F.R. Ashley, WB4M, 2731 Blanche Dr., Burlington, NC 27215.

FOX HUNT 2nd place winner in the Greensboro ARC (NC) was Roger (Doug) Duncan, NN4P of Eden, N.C. Doug was also presented a gold cup and Tee Shirt. Both winners of the Fox Hunt were from out of town, one from Collinsville, Va. The fox hunt is the Greensboro club's last project before their annual Greater Greensboro Hamfest on November 27-28 at the National Guard Armory in Greensboro, N.C.

Editorial Comment

WE HAVE "DONE" GOOD!

Continued From Page 1

We do welcome you newcomers to our organization, and we appreciate you joining up.

To the two winners, Gene Marden, AI4W who won in June, and Bart Harman KB4FJ who won in September, we offer our congratulations.

Most especially we wish to thank Tom Gentry at Encomm for being public spirited enough to sell CVRA-SERA those two Santec prizes at an unheard of low price. We would like to thank the Ten dealers: Amateur Radio Repair Center, Dynamic Engravers, Doc's Communications, West Antenna Service, Electronic Accessories, F & M Electronics, Holliday Steel Rule & Die, Co., Hometronics, Williams Radio and G.I.S.M.O. for donating enough money to pay for the prizes.

Finally, I wish to thank the "Ole Virginia Hams" of Manassas, and the Shelby Amateur Radio Club for allowing us to use their hamfests and P.A. systems to have our two drawings. And most of all to all the people who worked and helped make our contest a success, a most grateful thank you from all of us on the Repeater Journal staff.

Lots of people put in a lot of hours on this promotion. We think it was worth it . . . who knows, we just might try to do it again someday. And next time we won't set our goals too high!

Wayne C. Williams, K4MOB
Editor

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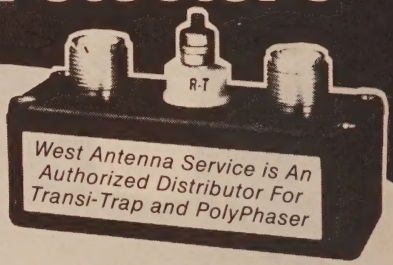

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Model HV Protector, handles 2 kW output thru 500 MHz **$32.95**

Replacement Arc-Plug Cartridges for Models LT **$9.95**, R-T **$9.95**, HV **$12.95**

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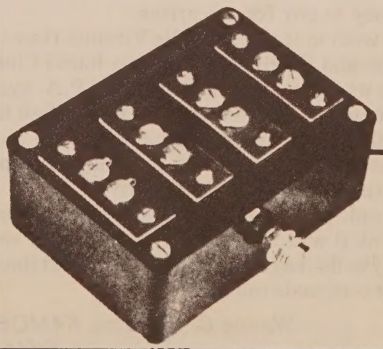

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DUES INCREASE JAN. 1

Cost of Associate Membership in CVRA-SERA will rise to $4.00 on January 1, 1983. Persons joining or renewing with their mail reaching our CVRA-SERA Post Office box by the close of day December 31, will be eligible for a full year's credit for $3.00.

Applications received after January 1, must have the $4.00 fee enclosed to receive a full year's membership.

JOURNAL TO CHANGE FORMAT FOR FEBRUARY

—by Wayne C. Williams, Editor

The REPEATER JOURNAL will make sweeping changes in format and size beginning with the February 1983 issue. The new size will be more compatable with the National magazine 8½ x 11 inch format. Our new size will enable us to get 40% more copy on a page, which naturally will reduce the overall total number of pages per issue.

The "new" JOURNAL will use the 3 column news format. This gives us much more versatility in presenting you news and information in a more attractive manner.

Our advertisers will have more than triple the choice of ad sizes, and with more smaller ads, you will get more news per page. In most instances, news or information will be on at least 90% of the pages in the book.

The format similar to the one we presently use was originally designed when the REPEATER JOURNAL was duplicated on a very small press. It was simple to take an 8½ x 14 sheet of paper, print it on both sides and fold it into four pages. Now after being on large printing presses for the past 5 years, the JOURNAL is ready for the move to a more standard format.

All advertisers will receive an information packet in the mail in late November, advising them of rates, and ad sizes. All hamfest clubs which have hamfests scheduled between February and May will also receive a packet explaining their advertising rates and sizes available.

We hope you will like the new JOURNAL in February. It will save us money, and in the long run, save you money by delaying additional membership increases.

And The 2nd Winner Is . . .

BART HARMAN KB4FJ WINS 2nd CVRA-SERA HANDHELD PRIZE

—by David Ward, KA4LVO
Associate Membership

"I'll check it out."

This was the reason Bart Harman, KB4FJ came to the CVRA-SERA booth at Shelby as Don Morris, Lindsay Cleveland and I were packing up and getting ready to leave the Cleveland County Fairgrounds on Sunday afternoon.

Bart believed that Don had misread the name and call on the winner of the Santec ST-144 2-meter transceiver, but he felt he ought to check anyway.

Formerly WD4HCJ, Bart became a ham in 1977. He joined CVRA in August, 1978, and it was his renewal on May 14, 1982 that put him in the Santec drawing. He told me that he was packing up his camper when the time came for the hamfest prizes to be given away. He remarked to his wife, Marcia, that there was no need to listen; someone else would win. But not this time. This was Bart's fifth year of coming to Shelby and the first time of winning anything at a hamfest.

Bart and his family live in the small community of Vilas, just West of Boone, N.C. where he works in vehicle maintenance. He and his wife have two children, Eric, age 8, and Vonda, age 11.

Next time you're passing through Boone, give Bart a call on the 96-36 WA4KDB repeater. He just might answer you on his new toy!

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	HODGES/GREENWOOD	SC
	CHATTANOOGA	TN
4.55 /5.15	ATLANTA	GA
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	MAYODAN	NC
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	LOUDON CTY.	TN
	MURFREESBORO	TN
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	HNDSNVL/PINCK MT	NC
	RALEIGH	NC
	KNOXVILLE	TN
	MANASSAS	VA
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4.69 /5.29	ATLANTA	GA
	CLEVELAND	GA
	CHARLOTTE	NC
	WEST JEFFERSON	NC
4.71 /5.31	ATLANTA	GA
	ROCK HILL	SC
	ATHENS	TN
	BLOUNTVILLE	TN
	LAYLAND/MANN MT	WV
4.73 /5.33	JONESBORO	GA
	FISHER PEAK	NC
	BAMBERG	SC
	KNOXVILLE	TN
	PARSONS	WV
4.75 /5.35	DECATUR	GA
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	CANTON/CHBRS MT	NC
	CHARLOTTE	NC
	GREENVILLE	NC
	BLAND	VA
	BALLS CHURCH	VA
4.77 /5.37	COLUMBUS-RTTY	GA
	SAVANNAH	GA
	N. WILKESBORO	NC
	KNOXVILLE	TN
	BECKLEY	WV
4.79 /5.39	GRAYSON	EK
	GRIFFIN	GA
	SIMPSONVILLE	GA
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	STANTONVILLE	TN
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	GREENEVILLE	TN
	MEMPHIS	TN
4.83 /5.43	KENNESAW	GA
	MACON	GA
	FAYETTEVILLE	NC
	NEWTON	NC
	WILSON	NC
	NASHVILLE	TN
	GALAX	VA
	RICHMOND	VA
	MORGANTOWN	WV
4.85 /5.45	JONESBORO	GA
	ANDSN MT/NEWTON	NC
	LINCOLNTON	NC
	NEWPORT	NC
	BENTON	TN
	WELCH	WV
4.87 /5.47	ROSWELL	GA
	LILLINGTON	NC
	KNOXVILLE	TN
	MOUNTAIN CITY	TN
	KINGSTON/LICK KB	WV
4.89 /5.49	VIENNA	GA
	COWEE BALD	NC
	RALEIGH	NC
	MCMINVL/SHT MT	TN
	MEMPHIS	TN
	BLUEFIELD	VA
	BLUEFIELD	WV
6.625/6.025	MARTIN	TN
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6.685/6.085	WAVERLY	TN
6.715/6.115	RINGGOLD	GA
	PULASKI	TN
6.835/6.235	HAMILTON	GA
6.865/6.265	HORNBEAK	TN
6.895/6.295	MITCHELL*	GA
	CONYERS	GA
	COVINGTON	GA
6.01 /6.61	COLUMBUS	GA
	WARNER ROBBINS	GA
	GREENSBORO	NC
	NEW BERN	NC
	BEAUFORT	SC
	CHICASEA	SC
	GRNVLE/CSRS HD	SC
	MYRTLE BEACH	SC
	CHATTANOOGA	TN
	NASHVILLE	TN
	BROMLEY MT	VA
	LYNCHBURG	VA
	SPENCER	WV
6.025/6.625	LAURINBURG	NC
	NEW MARKET	VA
6.035/6.635	BETSY LAYNE	EKY
6.04 /6.64	ATLANTA	GA
	CARROLTON	GA
	WAYCROSS	GA
	HENDERSONVILLE	NC
	RALEIGH	NC
	WINSTON-SALEM	NC
	SUMTER	SC
	CROSSVILLE	TN
	MADISON	TN
	MEMPHIS	TN
	FINCASTLE	VA
	MARION	VA
	RICHMOND	VA
	ELKINS	WV
	HUNTINGTON	WV
6.055/6.655	CONCORD/KANNAP.	NC
	ALEXANDRIA	VA
	ALTAVISTA	VA
6.06 /6.66	MACON	GA
	CHARLESTON	SC
6.07 /6.67	HAZARD	EKY
	GAINESVILLE*	GA
	JESUP	GA
	BURLINGTON	NC
	FOREST CITY	NC
	COLUMBIA	SC
	BRISTOL	TN
	COOKEVILLE	TN
	KAFOLLETTE	TN
	NASHVILLE	TN
	BARREN SPRINGS	VA
	BRISTOL	VA
	LEXINGTON	VA
	WILLIAMSBURG	VA
	RAVENSWOOD	WV
6.085/6.685	ADAIRSVILLE	GA
	GRIFTON	NC
	STATESVILLE	NC
6.10 /6.70	ALBANY	GA
	JASPER	GA
	MILLEDGEVILLE	GA
	SAVANNAH	GA
	DUNN	NC
	GREENVILLE	SC
	LANCASTER	SC
	CHATTANOOGA	TN
	FRAYSER	TN
	GREENEVILLE	TN
	MANCHESTER	TN
	MEMPHIS	TN
	UNION CITY	TN
	DANVILLE	VA
	NORFOLK	VA
	RAVENSWOOD	WV
6.115/6.715	SPRING LAKE	NC
	BLACKSBURG	VA
	STERLING	VA
6.12 /6.72	COAL MTN	WV
6.13 /6.73	LOUISA	EKY
	ATHENS	GA
	BRUNSWICK	GA
	MARIETTA	GA
	SYLVESTER	GA
	RALEIGH	NC
	SALISBURY	NC
	WILMINGTON	NC
	N. AUGUSTA	SC
	SIMPSONVILLE	SC
	KNOXVILLE	TN
	LEBANON	TN
	MEMPHIS	TN
	HAMPTON	VA
	ALDERSON	WV
6.14 /6.74	FRANKLIN	NC
6.145/6.745	DILLON/PEE DEE	SC
	DYERSBURG	TN
	ROANOKE	VA
6.16 /6.76	STONE MTN	GA
	VALDOSTA	GA
	ASHVL/MT PISGAH	NC
	GREENSBORO	NC
	GRIFTON	NC
	CHARLESTON	SC
	COLUMBIA	SC
	BRISTOL/HLSTN MT	TN
	NASHVILLE	TN
	CHARLOTTESVILLE	VA
	FOREST	VA
	HUNTINGTON	WV
	MORGANTOWN	WV
	WHEELING	WV
6.175/6.775	CHARLOTTE	NC
	ELIZABETHTOWN	NC
	WYTHEVILLE	VA
6.19 /6.79	PIKEVILLE*	EKY
	FOLKSTON	GA
	MOULTRIE	GA
	NEWNAN	GA
	SWAINSBORO	GA
	LEVEL CROSS/GBO	NC
	ANDSN/SASFRAS MT	SC
	SUMMERVILLE	SC
	CHATTANOOGA	TN
	JOHNSON CITY	TN
	NASHVILLE	TN
	PIKEVILLE(KY)	TN
	CHESAPEAKE	VA
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6.205/6.805	GASTONIA	NC
	WASHINGTON	NC
6.22 /6.82	ALBANY	GA
	ATLANTA	GA
	LYONS	GA
	DURHAM	NC
	ROARING GAP	NC
	WILMINGTON	NC
	GRNVLE/PARIS MT	SC
	LAKE CITY	TN
	MEMPHIS	TN
	WINCHESTER	TN
	COVINGTON	VA
	WINCHESTER	VA
	CHARLESTON	WV
	CLARKSBURG	WV
6.235/6.835	ASHEVILLE	NC
	BODIE ISLAND	NC
	WADESBORO	NC
	HAZEL MT	VA
7.255/6.835	LEXINGTON	SC
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	DALLAS	GA
	WARNER ROBBINS	GA
	GOLDSBORO	NC
	HICKORY/BRT. MT	NC
	REIDSVILLE	NC
	FLORENCE	SC
	LAURENS	SC
	COVE MTN/GTLBG	TN
	MEMPHIS	TN
	NASHVILLE	TN
	PORTSMOUTH	VA
	STAUNTON	VA
	BKLY/FLAT TOP MT	WV
	BUCKHANNON	WV
6.265/6.865	HIGH POINT	NC
	FAYETTEVILLE	TN
6.28 /6.88	MAYTOWN	EKY
	COLUMBUS	GA
	MARIETTA	GA
	QUITMAN	GA
	SAVANNAH*	GA
	RALEIGH	NC
	SHELBY	NC
	COLUMBIA	SC
	BRISTOL	TN
	MEMPHIS	TN
	NASHVILLE	TN
	OAK RIDGE	TN
	BRISTOL	VA
	RICHMOND	VA
	SALEM	VA
	CHARLESTON	WV
6.285/6.885	DILLSBORO	NC
6.295/6.895	WAXHAW	NC
6.31 /6.91	MOREHEAD	EKY
	GAINESVILLE	GA
	GRIFFIN	GA
	AHOSKIE	NC
	ASHVL/SPIVEY MT	NC
	FAYETTEVILLE	NC
	LEXINGTON	NC
	WHITE HALL	SC
	SAVANNAH	TN
	SHORT MT/SMTHVL	TN
	FAIRFAX	VA
	FARMVILLE	VA
	JONESVILLE	VA
	RIPPLEMEADE	VA
	COTTAGEVILLE	WV
	FAIRMONT	WV
	MCMECHEN	WV
6.325/6.925	CHARLOTTESVILLE	VA
	DANVILLE(DCC)	VA
6.34 /6.94	ASHLAND	EKY
	ATLANTA	GA
	AUGUSTA	GA
	ROME	GA
	WRIGHTSVILLE	GA
	BURGAW	NC
	CHARLOTTE	NC
	DURHAM	NC
	MANTEO	NC
	CHARLESTON	SC
	COLUMBIA	SC
	GREER	SC
	KNOXVILLE	TN
	MEMPHIS	TN
	NASHVILLE	TN
	HAMPTON	VA
	RICHMOND	VA
	ROANOKE	VA
	BECKLEY	WV
	NEW MARTINSVLLE	WV
	RICHWOOD	WV
	WEIRTON	WV
6.355/6.955	ROCKINGHAM	NC
6.37 /6.97	ATLANTA	GA
	SAVANNAH*	GA
	KINGS MTN	NC
	MT AIRY	NC
	SMITHFIELD	NC
	ANDERSON/LOCAL	SC
	FLORENCE	SC
	ALTAMONT	TN
	KNGSPT/BAYS MT	TN
	MEDINA	TN
	OAK RIDGE	TN
	MANASSAS	VA
	VIRGINIA BEACH	VA
	LOGAN	WV
	PARKERSBURG	WV
6.385/6.985	PRESTON	GA
	ALBEMARLE	NC
	ROANOKE/POOR MT	VA
6.40 /7.00	ATLANTA	GA
	LAGRANGE	GA
	SANDY SPRINGS	GA
	HIGH POINT	NC
	JACKSONVILLE	NC
	MARION	SC
	PICKENS	SC
	MEMPHIS	TN
	SUFFOLK	VA
	ST ALBANS	WV
7.60 /7.00	ELKHORN CITY	EKY
	HIGH POINT	NC
	BLOUNTVILLE	TN
	CHATTANOOGA	TN
	CLARKSVILLE	TN
	HAYSI	VA
	SERRA ALTA	WV
6.415/7.015	BLUEFIELD	VA
	BLUEFIELD	WV
7.615/7.015	CHARLOTTE	NC
	SUMTER	SC
	NASHVILLE	TN
	FREDRICKSBURG	VA
6.43 /7.03	ERWIN	NC
	ROCK HILL	SC
	FRAYSER	TN
	LEXINGTON	TN
	DEWITT	VA
7.63 /7.03	PANTSVILLE	EKY
	SAVANNAH	GA
	GREENSBORO	NC
	ROANOKE RAPIDS	NC
	MYRTLE BEACH, N	SC
	FAYETTEVILLE	TN
	HENDERSONVILLE	TN
	MEMPHIS	TN
	MORRISTOWN	TN
	SPRINGFIELD	TN
	WAYNESBORO	VA
	MULLENS	WV
6.445/7.045	HOPE MILLS	NC
	ROBBINSVILLE	NC
	ARLINGTON	VA
7.645/7.045	DETTER	VA
	RADFORD	VA
	STAUNTON	VA
	VIRGINIA BEACH	VA
6.06 /7.06	MADISON	WV
6.46 /7.06	COHUTTA-RTTY	GA
	CHARLOTTE	NC
	ELIZABETH CITY	NC
	MEMPHIS	TN
	PRINCETON	WV
7.66 /7.06	ATLANTA GA TECH	GA
	MACON	GA
	THOMASVILLE	GA
	MACO	NC
	SUMTER	SC
	GREENEVILLE	TN
	SHELBYVILLE	TN
	RICHMOND	VA
	POINT PLEASANT	WV
6.475/7.075	BURLINGTON	NC
7.675/7.075	BURLINGTON	NC
	GREENVILLE	SC
	KNOXVILLE	TN
	CTAUNTN/AFTON MT	VA
7.69 /7.09	GREENVL/ESTN NC	NC
	ORANGEBURG	SC
	SPARTANBURG	SC
	MEMPHIS	TN
	SPARTA	TN
	GALAX/BRIRP MT	VA
7.70 /7.10	BLAIRSVILLE	GA
7.705/7.105	MARION/OLD FORT	NC
	MONROE	NC
	BEDFORD	VA
	BRIDGEPORT	WV
6.09 /7.11	LOGAN	WV
7.72 /7.12	CEDARTOWN	GA
	GAST/SPCR MT	NC
	ROCKY MOUNT	NC
	MYRTLE BEACH	SC

	N. AUGUSTA	SC
	COLUMBIA	TN
	MEMPHIS	TN
	OAK RIDGE	TN
	CULPEPPER	VA
	BRIDGEPORT	WV
	DUNBAR	WV
7.735/7.135	BREVARD	NC
	CHERAW	SC
	GALAX	VA
7.75 /7.15	CUMMING	GA
	MORGANTON	NC
	RALEIGH	NC
	MONCKS CORNER	SC
	SIMPSONVILLE	SC
	MEMPHIS	TN
	NASHVILLE	TN
	OAK RIDGE	TN
	TAZEWELL	VA
	MCMECHEN	WV
7.765/7.165	GREENSBORO	NC
	GREENWOOD	SC
	HOHENWALD	TN
	NEWPORT NEWS	VA
	WARRENTON	VA
7.78 /7.18	AUGUSTA*	GA
	BALDWIN	GA
	MT AIRY	NC
	SANFORD	NC
	CAROLINDS	SC
	GOOSE CREEK	SC
	CLEVELAND	TN
	MEMPHIS	TN
	NASHVILLE	TN
	DUBLIN	VA
	PETERSBURG	VA
	LEON	WV
7.795/7.195	ATLANTA	GA
	LAKE TOXAWAY	NC
	LYNCHBURG	VA
7.81 /7.21	CONYERS	GA
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	WEST BROW	GA
	GREENSBORO	NC
	WHITEVILLE	NC
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	JACKSON	TN
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	MCLEAN	VA
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	ASHLAND	EKY
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	CARTHAGE	NC
	EDEN	NC
	FOREST CITY	NC
	FRANKLIN	NC
	COLUMBIA	SC
	LANCASTER	SC
	GALLATIN	TN
	MEMPHIS	TN
	PETERSBURG	VA
	WOODBRIDGE	VA
	ATLANTA	GA
	ASHEBORO	NC
	LUMBERTON	NC
	MARION	NC
	PARKSLEY	VA
	MARTINSBURG	WV
7.87 /7.27	AMERICUS	GA
	BUFORD	GA
	BENSON	NC
	WAYNESVILLE	NC
	CHARLESTON	SC
	LONG MT	SC
	SUMMERVILLE	SC
	GALLATIN	TN
	JOHNSON CITY	TN
	MEMPHIS	TN
	GUM SPRING	VA
	SCOTT DEPOT	WV
7.885/7.285	AIKEN	SC
	LYMAN	SC
	MARTINSVILLE	VA
7.90 /7.30	SVR CRK/MT ALTO	GA
	WARNER ROBBINS	GA
	JACKSONVILLE	NC
	OXFORD	NC
	TUCKASEGEE	NC
	KNOXVILLE	TN
	MEMPHIS	TN
	NASHVILLE	TN
	BERRYVILLE	VA
	CLIFTON FORGE	VA
	FRANKLIN	VA
	HUNTINGTON	WV
6.915/7.315	HENDERSONVILLE	TN
7.915/7.315	UNION CROSS	NC
	BENTSVILLE	TN
	ALEXANDRIA	VA
7.92 /7.32	GRUNDY	VA
7.93 /7.33	LAGRANGE	GA
	TOCCOA*	GA
	FAYETTEVILLE	NC
	LENOIR	NC
	COLUMBIA	SC
	COVINGTON	TN
	CROSSVILLE	TN
	NASHVILLE	TN
	KLMNRK/SALUDA	VA
	LEXNGTN/COLE MT	VA
7.945/7.345	SHELBY	NC
	GATE CITY	VA
	FRANKLIN	WV
7.95 /7.35	DANVILLE	VA
7.96 /7.36	DOUGLASVILLE	GA
	DUBLIN	GA
	BOONE	NC
	GREENVILLE	NC
	LUMBERTON	NC
	COLUMBIA	SC
	KNOXVILLE	TN
	MEMPHIS	TN
	NASHVILLE	TN
	PARIS	TN
	CHESTERFIELD	VA
	PARKERSBURG	WV
7.975/7.375	BURNSVILLE	NC

	HILLSVILLE	NC
	NASHVILLE	TN
	HILLSVILLE	VA
	LYNCHBURG	VA
	NEWPORT NEWS	VA
	GRAFTON	WV
7.99 /7.39	JENKINS	EKY
	THOMASTON	GA
	EDEN/STONEVILLE	NC
	SMITHFIELD	NC
	DAYTON/RHEA CTY	TN
	JONESBORO	TN
	MEMPHIS	TN
	NASHVILLE	TN
	PETERSBURG	VA
6.43 /7.43	GRIFFIN	GA
5.00 /7.50	CHARLOTTE	NC
6.19 /7.51	MEMPHIS	TN
7.015/7.615	CLEVELAND	GA
7.075/7.675	BUFORD	GA
7.135/7.735	VALDOSTA	GA
	ALAMO	TN
7.225/7.825	CLOUDLAND	GA
7.285/7.885	ASHBURN	GA
7.30 /7.90	ROME	GA
	MONROE	NC
7.315/7.915	DALTON*	GA
	FORSYTH	GA
6.085/7.955	MORGANTOWN	WV
7.375/7.975	ATHENS*	GA
5.33 /CKET	MEMPHIS	TN

10 METERS

9.60 /9.60	CHARLOTTESVILLE	VA
9.52 /9.62	KNOXVILLE	TN
	MEMPHIS	TN
9.56 /9.66	NEWPORT	NC

6 METERS

3.05 /2.05	MARIETTA	GA
2.58 /2.48	FAIRFAX	VA
2.525/2.525	HENDERSONVILLE	NC
	HILLSBOROUGH	NC
2.76 /2.525	KNOXVILLE	TN
3.525/2.525	NORFOLK	VA
2.01 /3.01	HENDERSONVILLE	NC
	NEWPORT	NC
	CHATTANOOGA	TN
	MEMPHIS	TN
	ABINGTON	VA
	LEXNGTN/COLE MT	VA
	NORTN/HIGH KB	VA
2.03 /3.03	CHARLOTTE	NC
2.05 /3.05	RALEIGH	NC
2.07 /3.07	SOUTH BOSTON	VA
2.13 /3.13	ALEXANDRIA	VA
	DANVILLE(DCC)	VA
2.15 /3.15	HIGH POINT	NC
	KNOXVILLE	TN
	LYNCHBURG	VA
2.35 /3.35	CARY	NC
2.47 /3.47	HICKORY	NC
2.64 /3.64	KNOXVILLE	TN
2.67 /3.67	STATESVILLE	NC

220 MHZ

2.22 /3.82	FALLS CHURCH	VA
2.30 /3.90	COLUMBIA	SC
2.32 /3.92	HIGH POINT	NC
2.34 /3.94	CANTON	GA
	ASHPL/MT PISGAH	NC
	HILLSBOROUGH	NC
	FAIRFAX	VA
	SUFFOLK	VA
2.34 /3.95	MEMPHIS	TN
2.36 /3.96	ROCKY MOUNT	NC
2.38 /3.98	LINWOOD	NC
	NASHVILLE	TN
2.40 /4.00	LOCUST	NC
2.42 /4.02	FAYETTEVILLE	NC
	HICKORY	NC
	NASHVILLE	TN
2.44 /4.04	WINSTON-SALEM	NC
2.46 /4.06	EASLEY/SASFRS MT	SC
2.52 /4.12	KENNESAW	GA
2.54 /4.14	PICKENS	SC
	HUNTINGTON	WV
2.64 /4.24	CANTON/CHBRS MT	NC
2.70 /4.30	STATESVILLE	NC
2.74 /4.34	GALAX	VA
2.80 /4.40	CHARLOTTE	NC
2.86 /4.46	KNOXVILLE	TN
2.94 /4.54	MT MITCHELL	NC
3.00 /4.60	ASHEVILLE	NC
3.04 /4.64	RALEIGH	NC
	WINSTON-SALEM	NC
3.06 /4.66	CANTON	GA
3.08 /4.68	CHARLOTTE	NC
3.10 /4.70	WINSTON-SALEM	NC
3.16 /4.76	SALISBURY	NC
	DAN/WHT OAK	VA
3.18 /4.78	CHATTANOOGA	TN
3.20 /4.80	MORGANTON	NC
3.22 /4.82	ATLANTA	GA
	GREENSBORO	NC
	ALEXANDRIA	VA
3.28 /4.88	WSTFLD/SAUTN MT	NC
3.30 /4.90	CHATTANOOGA	TN
3.34 /4.94	KENNESAW	GA
	SYLVA	NC
	GREENEVILLE	TN
	LYNCHBURG	VA
3.36 /4.96	CHRYVL/BKRS MT	NC

440 MHZ

9.25 /6.27	ALEXANDRIA	VA
9.25 /7.25	ALBANY	GA
	CHATTANOOGA	TN

	MEMPHIS	TN
	LYNCHBURG	VA
	PETERSBURG	VA
9.10 /4.50	CHARLESTON	SC
9.60 /4.60	ALEXANDRIA	VA
9.65 /4.65	GREENEVILLE	TN
9.70 /4.70	SALISBURY	NC
	KNOXVILLE	TN
9.775/4.775	NASHVILLE	TN
9.80 /4.80	CANTON/CHBRS MT	NC
	GREENVILLE	NC
	MEMPHIS	TN
	KINGSTON/LICK KB	WV
	MORGANTOWN	WV
9.85 /4.85	CHARLOTTE	NC
	PETERSBURG	VA
9.875/4.875	NASHVILLE	TN
9.90 /4.90	ASHVL/MT PISGAH	NC
	GREENSBORO	NC
9.95 /4.95	BENTON/BEAN MT	TN
	STAUNTON	VA
	VIRGINIA BEACH	VA
9.975/4.975	NASHVILLE	TN
2.25 /7.25	ROCK HILL	SC
2.50 /7.50	ROANOKE/POOR MT	VA
4.225/9.225	MANASSAS	VA
4.25 /9.25	STONE MTN	GA
4.50 /9.50	WARNER ROBBINS	GA
4.60 /9.60	BUCKHEAD	GA
4.75 /9.75	FAIRFAX	VA
4.85 /9.85	ANNANDALE	VA
4.90 /9.90	WOODBRIDGE	VA
7.05 /2.05	MEDINA	TN

7.25 /2.25	COVINGTON	VA
	SOUTH BOSTON	VA
7.75 /2.75	ROANOKE	VA
7.80 /2.80	FRANKLIN	TN
	MEMPHIS	TN
7.90 /2.90	HIGH POINT	NC
8.00 /3.00	MEMPHIS	TN
8.30 /3.30	FAYETTEVILLE	NC
8.40 /3.40	MEMPHIS	TN
8.50 /3.50	TYSONS CORNER	VA
8.65 /3.65	MT MITCHELL	NC
8.70 /3.70	LOCUST	NC
8.75 /3.75	ALAMO	TN
	FINCASTLE	VA
9.00 /4.00	ARLINGTON	VA
9.05 /4.05	WAYNSBR/AFTON MT	VA
9.10 /4.10	HILLSBOROUGH	NC
	COLUMBIA	SC
9.15 /4.15	LEXNGTN/COLE MT	VA
9.20 /4.20	COLUMBUS	GA
9.25 /4.25	CHARLOTTESVILLE	VA
9.30 /4.30	KNOXVILLE	TN
	MEMPHIS	TN
	WAYNESBORO	VA
9.35 /4.35	LYNCHBURG	VA
9.40 /4.40	FAYETTEVILLE	NC
	OAK RIDGE	TN
9.45 /4.45	LYNWOOD	NC
	GALLATIN	TN
	FALLS CHURCH	VA
9.50 /4.50	KENNESAW	GA
	BRISTOL/HLSTN MT	TN
	KNOXVILLE	TN

TENNESSEE REPEATERS

TWO METERS

ALAMO	WB4EDS	147.135	147.735	N	
ALTAMONT	WR4AWN	146.37	146.97	N	
ATHENS	WB4GRC	144.71	145.31	N	
BENTON	K4SIR	144.85	145.45	N	
BLOUNTVILLE	WB4RAV	144.71	145.31	N	C
BLOUNTVILLE	WA4KMG	147.60	147.00		PA
BRISTOL	K4ILW	146.07	146.67		A
BRISTOL	W4SZP	146.28	146.88		A
BRISTOL/HLSTN MT	WR4ADO	146.16	146.76		
BROWNSVILLE	WA4ABU	146.655	146.055	N	A
CENTERVILLE	WB4PZB	147.915	147.315	N	
CHATTANOOGA	K4CMY	144.53	145.13		
CHATTANOOGA	KB4TZ	144.79	145.39		A
CHATTANOOGA	K4CMY	146.01	146.61		
CHATTANOOGA	AD4F	146.10	146.70	N	
CHATTANOOGA	W4DSK	146.19	146.79		A
CHATTANOOGA	WA4ZOK	147.60	147.00		PA
CLARKSVILLE	WA4TEQ	147.60	147.00	N	
CLEVELAND	WR4AQV	147.78	147.18	N	
COLUMBIA	WR4AIX	147.72	147.12	N	
COOKEVILLE	WR4ANW	146.07	146.67	N	
COOKEVILLE	N4WS	147.81	147.21		
COVE MTN/GTLBG	WA4KJH	146.25	146.85		
COVINGTON	WA4VXW	147.93	147.33	N	
CROSSVILLE	WR4AKO	146.04	146.64	N	
CROSSVILLE	WR4BEL	147.93	147.33	N	
DAYTON/RHEA CTY	K4ZLA	147.99	147.39	N	
DECATUR-PONE KB	W4RJC	144.55	145.15		
DYERSBURG	AA4HF	146.145	146.745	N	
FAYETTEVILLE	KO4G	146.265	146.865	N	
FAYETTEVILLE	WR4BAQ	147.63	147.03	N	
FISHERVILLE	N4DRL	144.65	145.25	N	A
FRAYSER	W4UFT	146.10	146.70	N	
FRAYSER	W4ZJM	146.43	147.03	N	
GALLATIN	KA4LUG	147.84	147.24		
GALLATIN	WA4YQC	147.87	147.27	N	
GREENEVILLE	WB4TUO	144.81	145.41	N	
GREENEVILLE	W4ANB	146.10	146.70	N	
GREENEVILLE	WA4LYF	147.66	147.06		A
HENDERSONVILLE	WB4ZCK	146.915	147.315	N	RB
HENDERSONVILLE	N4WF	147.63	147.03	N	
HOHENWALD	WB4LHV	147.765	147.165	N	
HORNBEAK	WA4OXK	146.865	146.265	N	
JACKSON	W4WKZ	147.81	147.21	N	
JASPER	KA4LGN	144.59	145.19	N	
JOHNSON CITY	WB4IKR	146.19	146.79		
JOHNSON CITY	KE4FH	147.87	147.27		A
JONESBORO	WB4SQC	147.99	147.39		PA
KNGSPT/BAYS MT	W4TRC	146.37	146.97		A
KNOXVILLE	WB4JSD	144.51	145.11		R
KNOXVILLE	K4KFD	144.61	145.21	N	A
KNOXVILLE	WB4GBI	144.67	145.27	N	
KNOXVILLE	WA4TEM	144.73	145.33		A
KNOXVILLE	WA4GZE	144.77	145.37		
KNOXVILLE	WB4GBI	144.87	145.47		
KNOXVILLE	WB4IOB	146.13	146.73		
KNOXVILLE	K4HXD	146.34	146.94		
KNOXVILLE	K4HXD	147.675	147.075		A
KNOXVILLE	W4BBB	147.90	147.30		
KNOXVILLE	WB4HAP	147.96	147.36		

LAFOLLETTE	W4TZG	146.07	146.67		
LAKE CITY	WB4OAH	146.22	146.82	N	
LEBANON	WR4BBM	146.13	146.73	N	
LEXINGTON	WB4LGH	146.43	147.03	N	
LOUDON CTY.	KE4SK	144.57	145.17		
MADISON	WB4NTM	146.04	146.64	N	
MANCHESTER	WR4ACI	146.10	146.70		A
MARTIN	WA4ZQX	146.625	146.025	N	
MCMINVL/SHT MT	W4KKC	144.89	145.49		
MEDINA	K4BEZ	146.37	146.97	N	AL
MEMPHIS	WA4VIP	144.81	145.41	N	
MEMPHIS	WA4KOG	144.89	145.49		
MEMPHIS	WB4MQD	145.33	PACKET	N	
MEMPHIS	W4GYS	146.04	146.64	N	
MEMPHIS	WR4AOG	146.10	146.70	N	R
MEMPHIS	KA4JXT	146.13	146.73	N	
MEMPHIS	WR4ABS	146.19	147.51	N	
MEMPHIS	WA4ADT	146.22	146.82	N	
MEMPHIS	WA4KOG	146.25	146.85		A
MEMPHIS	WA4ETE	146.28	146.88	N	A
MEMPHIS	K4BN	146.34	146.94	N	A
MEMPHIS	K4FZJ	146.40	147.00	N	
MEMPHIS	WA4MQC	146.46	147.06	N	
MEMPHIS	W4ZJM	147.63	147.03	N	L
MEMPHIS	WR4AWT	147.69	147.09	N	
MEMPHIS	WB4DAZ	147.72	147.12	N	AT
MEMPHIS	WA5KUR	147.75	147.15	N	
MEMPHIS	WA4KOG	147.78	147.18		
MEMPHIS	WD4APK	147.84	147.24		
MEMPHIS	WR4AZC	147.87	147.27	N	
MEMPHIS	WA4ADT	147.90	147.30	N	
MEMPHIS	W4MMI	147.96	147.36	N	
MEMPHIS	WR4ASR	147.99	147.39	N	
MIDDLEBRO(KY/TN)	W4PPM	144.63	145.23	N	
MORRISTOWN	WD4RTT	147.63	147.03		
MORRISTOWN	WB4OAH	147.825	147.225	N	
MOUNTAIN CITY	WD4OMO	144.87	145.47	N	
MURFREESBORO	WB4LHO	144.57	145.17	N	
NASHVILLE	N4AJS	144.65	145.25		PA
NASHVILLE	WB4ZSA	144.83	145.43		
NASHVILLE	WA4PCD	146.01	146.61	N	
NASHVILLE	WB4NTM	146.07	146.67	N	
NASHVILLE	WB4QES	146.16	146.76	N	
NASHVILLE	WR4AFA	146.19	146.79		
NASHVILLE	N4TK	146.25	146.85	N	
NASHVILLE	WB4QES	146.28	146.88	N	
NASHVILLE	WA4PCD	146.34	146.94	N	
NASHVILLE	AF4K	147.615	147.015	N	
NASHVILLE	WB4JVP	147.75	147.15	N	
NASHVILLE	WA4PCD	147.78	147.18	N	
NASHVILLE	WB4ZSA	147.90	147.30		PA
NASHVILLE	N4AJS	147.93	147.33		PA
NASHVILLE	WB4NTM	147.96	147.36	N	
NASHVILLE	WB4JTN	147.975	147.375	N	
NASHVILLE	WB4DLQ	147.99	147.39	N	
OAK RIDGE	W4SKH	146.28	146.88		
OAK RIDGE	W4SKH	146.37	146.97		A
OAK RIDGE	K4EAJ	147.72	147.12		L
OAK RIDGE	K4EAJ	147.75	147.15		R
PARIS	K4KLX	147.96	147.36	N	
PIKEVILLE(KY)	KA4BQH	144.59	145.19		
PIKEVILLE(KY)	N4ETG	146.19	146.79		
PULASKI	W4JVO	146.715	146.115	N	
SAVANNAH	WB4DQU	146.31	146.91	N	
SHELBYVILLE	WR4AQM	147.66	147.06	N	
SHORT MT/SMTHVL	W4YXA	146.31	146.91		
SPARTA	W4BSA	147.69	147.09		A
SPRINGFIELD	WR4AGH	147.63	147.03	N	
STANTONVILLE	KA4OHC	144.79	145.39	N	
UNION CITY	WR4AUQ	146.10	146.70	N	
WAVERLY	NO4Q	146.685	146.085	N	
WINCHESTER	WR4AFH	146.22	146.82		

220 MHZ

CHATTANOOGA	K4VCM	223.18	224.78		A
CHATTANOOGA	WA4ZOK	223.30	224.90		
GREENEVILLE	WB4NKM	223.34	224.94		A
KNOXVILLE	WA4YON	222.86	224.46		
MEMPHIS	W4ZJM	222.34	223.95	N	L
NASHVILLE	WB4ZSA	222.38	223.98		A
NASHVILLE	N4DKA	222.42	224.02	N	

440 MHZ

ALAMC	WB4EDS	448.75	443.75	N	L
BENTON/BEAN MT	K4SIR	449.95	444.95	N	C
BRISTOL/HLSTN MT	WR4ADO	449.50	444.50		
CHATTANOOGA	WA4ZOK	439.25	427.25		V
FRANKLIN	WB4EPG	447.80	442.80	N	
GALLATIN	WD4KWP	449.45	444.45		
GREENEVILLE	WB4NKM	449.65	444.65		
KNOXVILLE	K4HXD	449.30	444.30		
KNOXVILLE	KB4NK	449.50	444.50		
KNOXVILLE	WB4GBI	449.70	444.70		C
MEDINA	K4BEZ	447.05	442.05	N	AL
MEMPHIS	WA4QWW	447.80	442.80	N	
MEMPHIS	W4ZJM	448.00	443.00	N	
MEMPHIS	WA4DOA	448.40	443.40	N	A
MEMPHIS	WA4KOG	449.30	444.30	N	
MEMPHIS	KA4JKT	449.50	444.50	N	A
MEMPHIS	WD4APK	449.80	444.80		
NASHVILLE	N4TK	449.775	444.775	N	
NASHVILLE	WB4THG	449.875	444.875	N	
NASHVILLE	WB4QES	449.975	444.975	N	
OAK RIDGE	K4EAJ	449.40	444.40		L

TEN METERS

KNOXVILLE	K4HXD	29.52	29.62		C
MEMPHIS	W4ZJM	29.52	29.62	N	

SIX METERS

CHATTANOOGA	WB4LRD	52.01	53.01	N	
KNOXVILLE	WB4IOB	52.15	53.15		A
KNOXVILLE	WA4YON	52.64	53.64		
KNOXVILLE	K4HXD	52.76	52.525		
MEMPHIS	WA4KOG	52.01	53.01		

NORTH CAROLINA REPEATERS

TWO METERS

AHOSKIE	WB4YNF	144.53	145.13		A
AHOSKIE	WA4ZGQ	146.31	146.91		PA
ALBEMARLE	WA4LBT	146.385	146.985		
ANDSN MT/NEWTON	WD4LCF	144.85	145.45	N	
ASHEBORO	WD4AIB	147.855	147.255		PAL
ASHEVILLE	WA4QCO	146.235	146.835		A
ASHVL/MT PISGAH	WA4BVW	146.16	146.76		
ASHVL/SPIVEY MT	W4MOE	146.31	146.91		A
BENSON	WR4ARL	147.87	147.27	N	PA
BOGIE ISLAND	KE4PB	146.235	146.835	N	C
BOONE	WA4KDB	147.96	147.36		
BREVARD	N4DJB	147.735	147.135		
BURGAW	K4LZY	146.34	146.94		
BURLINGTON	WR4AKY	146.07	146.67		
BURLINGTON	W4VGZ	146.475	147.075	N	EA
BURLINGTON	WA4HBQ	147.675	147.075	N	EA
BURNSVILLE	WA4LLR	147.975	147.375		A
CANTON/CHBRS MT	WB4OKG	144.75	145.35		C
CARTHAGE	W4NIW	147.84	147.24		EA
CHARLOTTE	KA4HNP	144.57	145.17		
CHARLOTTE	W4PFB	144.63	145.23		
CHARLOTTE	WD4JWO	144.69	145.29		
CHARLOTTE	WB4HTR	144.75	145.35	N	
CHARLOTTE	KA4HNP	145.00	147.50		
CHARLOTTE	W4BFB	146.175	146.775		RC
CHARLOTTE	WR4AEU	146.34	146.94		
CHARLOTTE	WR4ALO	146.46	147.06	N	A
CHARLOTTE	WB4KPF	147.615	147.015		PA
CHRYVL/BKRS MT	WB4UDS	144.55	145.15		
CONCORD/KANNAP.	K4CER	146.055	146.655		A
COWEE BALD	N4AC	144.89	145.49	N	
DILLSBORO	WB4NSS	146.265	146.885		
DUNN	WB4FXM	146.10	146.70		
DURHAM	WA4WTX	146.22	146.82		
DURHAM	WA4BFT	146.34	146.94	N	A

CVRA REPEATER SYMBOLS

Unmarked in First Code column-Full CVRA Members

N	NON Member CVRA	RB	Remote Base System
D	Delinquent Member	T	Tone Access Repeater
M	T-MARC Repeater	L	Linked Repeater
A	Open Autopatch	R	Radioteletype Rptr.
PA	Private Autopatch	V	Television (SS or ATV)
EA	Emerg. Autopatch	P	Proposed Repeater
		C	Under Construction
		O	Off Air Temporarily

EDEN	WA4ACP	147.84	147.24	N	
EDEN/STONEVILLE	WA4QBG	147.99	147.39		
ELIZABETH CITY	WA4VTX	146.46	147.06	N	A
ELIZABETHTOWN	N4DHW	146.175	146.775	N	
ERWIN	WR4ALY	146.43	147.03	N	
FAYETTEVILLE	N4NG	144.83	145.43	N	C
FAYETTEVILLE	WR4ANN	146.31	146.91		A
FAYETTEVILLE	W4LPL	147.93	147.33		
FISHER PEAK	WD4MDP	144.73	145.33	N	
FOREST CITY	W4TMT	146.07	146.67	N	A
FOREST CITY	WA4BKU	147.84	147.24	N	
FRANKLIN	N4AC	146.14	146.74	N	
FRANKLIN	WB4YAO	147.84	147.24		
GAST/SPCR MT	W4REW	147.72	147.12		A
GASTONIA	K4ZFD	146.205	146.805	N	L
GOLDSBORO	K4CYP	146.25	146.85		A
GREENSBORO	N4AZM	144.65	145.25		
GREENSBORO	K4SNI	146.01	146.61		A
GREENSBORO	WR4AOD	146.16	146.76		
GREENSBORO	WD4IPZ	147.63	147.03		PA
GREENSBORO	WR4AUA	147.765	147.165	N	
GREENSBORO	WR4ANL	147.81	147.21	N	
GREENVILLE	N4GVK	144.75	145.35		
GREENVILLE	W4AMC	147.96	147.36		
GREENVL/ESTN NC	W4GDF	147.69	147.09		
GRIFTON	W4NBR	146.085	146.685		
GRIFTON	WR4ABP	146.16	146.76		O
HENDERSONVILLE	WB4YAO	146.04	146.64		L
HICKORY/BRT. MT	WR4ACM	146.25	146.85	N	
HIGH POINT	N4XO	144.51	145.11	N	C
HIGH POINT	KA4DHP	146.265	146.865		PA
HIGH POINT	K4AZA	146.40	147.00		LA
HIGH POINT	K4AZA	147.60	147.00		LA
HILLSBOROUGH	WA4WTX	147.825	147.225		A
HILLSVILLE	WD4BTS	147.975	147.375	N	A
HNDSNVL/PINCK MT	WA4KNI	144.67	145.27		
HOPE MILLS	WB4TRW	146.445	147.045	N	
JACKSONVILLE	WD4FVO	146.40	147.00		PA
JACKSONVILLE	WR4ATW	147.90	147.30	N	
KINGS MTN	WB4GXY	146.37	146.97	N	
LAKE TOXAWAY	WR4AGH	147.795	147.195	N	
LAURINBURG	K4QWK	146.025	146.625		
LENOIR	KN4K	147.93	147.33		
LEVEL CROSS/GBO	K4VUW	146.19	146.79		
LEWISVILLE	N4GGK	144.61	145.21		
LEXINGTON	K4IZM	146.31	146.91		PA
LILLINGTON	WA4FKI	144.87	145.47	N	
LINCOLNTON	WD4PLY	144.85	145.45	N	
LUMBERTON	KD4PI	147.855	147.255	N	RC
LUMBERTON	WR4BDQ	147.96	147.36		
MACO	WA4LED	147.66	147.06		
MANTEO	W4PCN	146.34	146.94		PA
MARION	WB4UCF	147.855	147.255	N	P
MARION/OLD FORT	KA4DEC	147.705	147.105		
MAYODAN	N4GWZ	144.55	145.15	N	C
MONROE	K4BGU	147.30	147.90	N	
MONROE	K4JCK	147.705	147.105		A
MORGANTON	K4RP	147.75	147.15		
MT AIRY	WA4ZAS	146.37	146.97		EA
MT AIRY	WA4CQK	147.78	147.18	N	
MT MITCHELL	WA4BVW	144.59	145.19		
N. WILKESBORO	K4ITL	144.77	145.37		L
NEW BERN	WD4JMS	146.01	146.61		A
NEWPORT	K4GRW	144.85	145.45		A
NEWTON	N4AWV	144.83	145.43	N	P
OXFORD	WA4JCS	147.90	147.30		A
RALEIGH	N4BEA	144.67	145.27		A
RALEIGH	N4BXF	144.89	145.49		PA
RALEIGH	W4DW	146.04	146.64		A
RALEIGH	K4BWC	146.13	146.73		A
RALEIGH	K4ITL	146.28	146.88		
RALEIGH	K4ITL	147.75	147.15		PA
REIDSVILLE	K4YFT	146.25	146.85		
ROANOKE RAPIDS	K4PUV	147.63	147.03		
ROARING GAP	WB4PZA	146.22	146.82		
ROBBINSVILLE	WB4ZQB	146.445	147.045	N	L
ROCKINGHAM	WA4ULA	146.355	146.955		
ROCKY MOUNT	WB4WAA	147.72	147.12		A
SALISBURY	W4EXU	146.13	146.73		
SANFORD	WB4EJJ	147.78	147.18		A
SHELBY	WD4DJA	146.28	146.88		
SHELBY	WD4DJA	147.945	147.345		A
SIMPSONVILLE	WA4PPV	144.79	145.39	N	P
SMITHFIELD	KD4JQ	146.37	146.97		A
SMITHFIELD	W4MKL	147.99	147.39		PA
SPRING LAKE	WR4BCA	146.115	146.715	N	
STATESVILLE	AI4O	146.085	146.685		PA
TUCKASEGEE	W8OMV	147.90	147.30	N	
UNION CROSS	WA4RBW	147.915	147.315		A
WADESBORO	W4USH	146.235	146.835	N	
WASHINGTON	WB4GMI	146.205	146.805	N	
WAXHAW	WB4ODA	146.295	146.895	N	C
WAYNESVILLE	N4SM	147.87	147.27		PA
WEST JEFFERSON	WD4JWO	144.69	145.29	N	C
WHITEVILLE	K4MSD	147.81	147.21	N	C
WILLIAMSTON	KA4KNU	144.81	145.41		
WILMINGTON	N4WI	146.13	146.73		
WILMINGTON	WB4UNG	146.22	146.82		O
WILSON	WB4THL	144.83	145.43	N	C
WIN-SAL/SAUTN MT	WB4KON	144.79	145.39		L
WINSTON-SALEM	WA4GIC	146.04	146.64		A

220 MHZ

ASHEVILLE	NC4N	223.00	224.60		
ASHVL/MT PISGAH	WA4BVW	222.34	223.94		
CANTON/CHBRS MT	WB4OKG	222.64	224.24		C
CHARLOTTE	KE4ZC	222.80	224.40	N	C
CHARLOTTE	WB4KPF	223.08	224.68		LA
CHRYVL/BKRS MT	WB4UDS	223.36	224.96	N	
FAYETTEVILLE	W4EHF	222.42	224.02		
GREENSBORO	KZ4O	223.22	224.82	N	RL
HICKORY	WR4ACM	222.42	224.02	N	
HIGH POINT	K4AZA	222.32	223.92		LA
HILLSBOROUGH	WA4WTX	222.34	223.94		L
LINWOOD	KA4HUV	222.38	223.98	N	
LOCUST	WA4ZIA	222.40	224.00		
MORGANTON	WB4PML	223.20	224.80		
MT MITCHELL	WA4BVW	222.94	224.54		
RALEIGH	WA4PEN	223.04	224.64	N	
ROCKY MOUNT	KA4DAP	222.36	223.96	N	
SALISBURY	W4EXU	223.16	224.76		
STATESVILLE	WA4PVI	222.70	224.30	N	
SYLVA	KA4V	223.34	224.94	N	
WINSTON-SALEM	WB4UGW	222.44	224.04	N	C
WINSTON-SALEM	WA4YHH	223.04	224.64	N	
WINSTON-SALEM	WA4GIC	223.10	224.70		R
WSTFLD/SAUTN MT	W4RXG	223.28	224.88		

440 MHZ

ASHVL/MT PISGAH	WA4COS	449.90	444.90	N	
CANTON/CHBRS MT	WB4OKG	449.80	444.80		C
CHARLOTTE	WR4ALO	449.85	444.85	N	
FAYETTEVILLE	N4NG	448.30	443.30	N	C
FAYETTEVILLE	KB4ZW	449.40	444.40	N	C
GREENSBORO	WB4HZI	449.90	444.90	N	
GREENVILLE	AI4J	449.80	444.80	N	C
HIGH POINT	K4AZA	447.90	442.90		L
HILLSBOROUGH	WA4WTX	449.10	444.10		
LOCUST	WA4LBT	448.70	443.70		
LYNWOOD	KA4HEV	449.45	444.45	N	P
MT MITCHELL	WA4BVW	448.65	443.65		C
SALISBURY	W4EXU	449.70	444.70		C

SIX METERS

CARY	WR4AVP	52.35	53.35	N	
CHARLOTTE	KE4ZC	52.03	53.03	N	C
HENDERSONVILLE	WB4YAO	52.01	53.01		
HENDERSONVILLE	WB4YAO	52.525	52.525		RB
HICKORY	WR4ACM	52.47	53.47	N	
HIGH POINT	K4AZA	52.15	53.15	N	L
HILLSBOROUGH	WA4WTX	52.525	52.525		RB
NEWPORT	K4GRW	52.01	53.01		P
RALEIGH	K4ITL	52.05	53.05	N	
STATESVILLE	WA4WRS	52.67	53.67	N	

EAST KENTUCKY REPEATERS

TWO METERS

ASHLAND	WR4ACQ	146.34	146.94	
ASHLAND	WR4ALH	147.84	147.24	
BETSY LAYNE	WA4YCU	146.035	146.635	
ELKHORN CITY	WR4AWR	147.60	147.00	EAO
GRAYSON	N4BDX	144.79	145.39	
HAZARD	K4VHF	146.07	146.67	
JENKINS	WD4PDJ	147.99	147.39	
LOUISA	WA4SWF	146.13	146.73	
MAYTOWN	N4ESP	146.28	146.88	O
MOREHEAD	K4GFY	146.31	146.91	
PANTSVILLE	WB4PLK	147.63	147.03	
PIKEVILLE	KA4BQH	146.25	146.85	
PIKEVILLE*	KA4BQH	144.59	145.19	O
PIKEVILLE*	N4ETG	146.19	146.79	PA

VIRGINIA REPEATERS

TWO METERS

ALEXANDRIA	WD4PDP	146.055	146.655	M	
ALEXANDRIA	W4HFH	147.915	147.315	M	
ALTAVISTA	WA4ISI	146.055	146.655	N	
ARLINGTON	WA4YVN	146.445	147.045	M	
BARREN SPRINGS	K4HZS	146.07	146.67		
BEDFORD	WB4JBJ	147.705	147.105		LR
BERRYVILLE	WA4TSC	147.90	147.30	M	
BLACKSBURG	AB9I	146.115	146.715		
BLAND	N4AZJ	144.75	145.35		L
BLUEFIELD	W8MOP	144.89	145.49	N	A
BLUEFIELD	WD8OGY	146.415	147.015		PA
BRISTOL	K4ILW	146.07	146.67		A
BRISTOL	W4SZP	146.28	146.88		
BROMLEY MT	WR4ATJ	146.01	146.61		
CHARLOTTESVILLE	WA4TFZ	146.16	146.76		
CHARLOTTESVILLE	WA4TFZ	146.325	146.925		
CHESAPEAKE	N4SD	146.19	146.79		A
CHESTERFIELD	KA4CBB	147.96	147.36		
CLIFTON FORGE	K4QEL	147.90	147.30	N	
COVINGTON	WA4HTI	146.22	146.82	N	
CULPEPPER	WR4BCS	147.72	147.12	M	
DANVILLE	K4WQS	146.10	146.70		
DANVILLE	WR4AHG	147.95	147.35	N	
DANVILLE(DCC)	WB4GJG	146.325	146.925		
DEWITT	WA4ZOZ	146.43	147.03	N	
DUBLIN	KT4Z	147.78	147.18		
FAIRFAX	W4LBL	146.19	146.79	N	PA
FAIRFAX	K4VYN	146.31	146.91	N	PA
FALLS CHURCH	W4AQD	144.75	145.35	M	
FARMVILLE	WB4NWP	146.31	146.91	N	A
FINCASTLE	W4WIC	146.04	146.64		
FOREST	K4STE	146.16	146.76		EA
FRANKLIN	K4SPS	147.90	147.30	N	PA
FREDRICKSBURG	WB4LNT	147.615	147.015		
GALAX	WA4ZIV	144.83	145.43	N	
GALAX	WA4DFH	147.735	147.135		
GALAX/BRIRP MT	WR4AHR	147.69	147.09		
GATE CITY	WD4GTA	147.945	147.345	N	
GRUNDY	K4HWQ	147.92	147.32	N	A
GUM SPRING	KB4GX	147.87	147.27	N	
HAMPTON	WR4ALW	146.13	146.73		
HAMPTON	WR4AFT	146.34	146.94	N	T
HAYSI	WR4AWR	147.60	147.00	N	
HAZEL MT	WD4CYZ	146.235	146.835	N	
HIGH KNOB/WISE	K4AXO	147.81	147.21		
HILLSVILLE	WD4BTJ	147.975	147.375		A
JONESVILLE	WA4OVC	146.31	146.91		
KLMNRK/SALUDA	WA4UAF	147.93	147.33		
LEBANON	N4ATT	144.61	145.21	N	C
LEXINGTON	WA4WBD	146.07	146.67		
LEXNGTN/COLE MT	K4PQD	147.93	147.33	N	
LYNCHBURG	WR4AXO	146.01	146.61	N	
LYNCHBURG	WA4RTS	147.795	147.195		
LYNCHBURG	W4OSH	147.975	147.375		PA
MANASSAS	WD4JCF	144.67	145.27	M	R
MANASSAS	W1CRO	146.37	146.97		PA
MARION	N4BIW	146.04	146.64		A
MARTINSVILLE	AB4L	147.885	147.285		
MCLEAN	WD4IWG	147.81	147.21	M	R
NEW MARKET	WB4DAK	146.025	146.625		
NEWPORT NEWS	WB4CTF	147.765	147.165		PA
NEWPORT NEWS	WA4CHX	147.975	147.375		PA
NORFOLK	WB4LJM	146.10	146.70		
PARKSLEY	WA4TVS	147.855	147.255	N	C
PETERSBURG	K4SII	147.78	147.18	N	
PETERSBURG	K4ARO	147.84	147.24		PA
PETERSBURG	K4ARO	147.99	147.39		
PORTSMOUTH	N4PR	146.25	146.85	N	
RADFORD	KC4WA	147.645	147.045		
RICHMOND	W4SQT	144.83	145.43		
RICHMOND	WB4QEY	146.04	146.64		
RICHMOND	WR4ACW	146.28	146.88	N	PA
RICHMOND	W4ZA	146.34	146.94		T
RICHMOND	WA4ECM	147.66	147.06	N	
RIPPLEMEADE	K4TUE	146.31	146.91		
ROANOKE	WB4QOJ	146.145	146.745		L
ROANOKE	WR4AHT	146.34	146.94		AO
ROANOKE/POOR MT	W4CA	146.385	146.985		L
SALEM	W4PDL	146.28	146.88	N	
STAUNTN/AFTON MT	W4PNT	147.675	147.075	N	LR
STAUNTON	WA4ZBP	146.25	146.85		
STAUNTON	W4WRN	147.645	147.045	N	
STERLING	WA4TXE	146.115	146.715	M	
SUFFOLK	WR4AKS	146.40	147.00	N	PA
TAZEWELL	WD4DZE	147.75	147.15	N	
VIRGINIA BEACH	WA4KXV	146.37	146.97		A
VIRGINIA BEACH	WA4SBC	147.645	147.045	N	
WARRENTON	WB4FJT	147.765	147.165	M	
WAYNESBORO	W4BLD	147.63	147.03		
WILLIAMSBURG	W4NTG	146.07	146.67		
WINCHESTER	W4RKC	146.22	146.82		
WOODBRIDGE	WB4FQR	147.84	147.24	M	A
WYTHEVILLE	WA4EMS	146.175	146.775		

220 MHZ

ALEXANDRIA	WA4CCF	223.22	224.82	M	
DAN/WHT OAK	K4OAK	223.16	224.76	N	
FAIRFAX	K4GCM	222.34	223.94	N	
FALLS CHURCH	N4CHP	222.22	223.82	M	
GALAX	WA4DFH	222.74	224.34		
LYNCHBURG	WB4DBB	223.34	224.94		C
SUFFOLK	WA4JUO	222.34	223.94	N	C

440 MHZ

ALEXANDRIA	WR4AAG	439.25	426.27	M	V
ALEXANDRIA	W4HFH	449.60	444.60	M	
ANNANDALE	WR4AQG	444.85	449.85	M	PL
ARLINGTON	K8ZOA	449.00	444.00	M	L
CHARLOTTESVILLE	WA4TFZ	449.25	444.25		
COVINGTON	WA4HTI	447.25	442.25	N	
FAIRFAX	K4JYF	444.75	449.75	N	
FALLS CHURCH	WB8CRK	449.45	444.45	M	L
FINCASTLE	W4WIC	448.75	443.75		
LEXNGTN/COLE MT	K4PQD	449.15	444.15	N	
LYNCHBURG	WB4DBB	449.35	444.35		L
LYNCHBURG	K4HEX	449.50	444.50	N	RB
MANASSAS	WD4JCE	444.225	449.225	M	L
PETERSBURG	K4ARO	449.50	444.50		
PETERSBURG	K4ARO	449.85	444.85		
ROANOKE	WR4AFE	447.75	442.75	N	
ROANOKE/POOR MT	W4CA	442.50	447.50		L
SOUTH BOSTON	WB4YWH	447.25	442.25	N	C
STAUNTON	W4WRN	449.95	444.95	N	C
TYSONS CORNER	WB6GUS	448.50	443.50	M	
VIRGINIA BEACH	WA4KXV	449.95	444.95		
WAYNESBORO	W4BLD	449.30	444.30		PA
WAYNSBR/AFTON MT	W4BLD	449.05	444.05		
WOODBRIDGE	WB4FQR	444.90	449.90	M	

SIX METERS

ABINGTON	WR4ATJ	52.01	53.01	M	L
ALEXANDRIA	WA4CCF	52.13	53.13	M	P
DANVILLE(DCC)	WB4GJG	52.13	53.13		
FAIRFAX	KA4DCS	52.58	52.48	M	
LEXNGTN/COLE MT	K4PQD	52.01	53.01	N	L
LYNCHBURG	WB4DBB	52.15	53.15		
NORFOLK	W4NV	53.525	52.525	N	
NORTN/HIGH KB	K4LSP	52.01	53.01		
SOUTH BOSTON	WB4YWH	52.07	53.07	N	C

TEN METERS

CHARLOTTESVILLE	K4RKA	29.60	29.60	N	RBC

SOUTH CAROLINA REPEATERS

TWO METERS

AIKEN	N4ADM	147.885	147.285		
ANDERSON/LOCAL	WR4AIC	146.37	146.97		PA
ANDSN/SASFRAS MT	WR4AIC	146.19	146.79		
BAMBERG	WA4DFP	144.73	145.33	N	
BEAUFORT	KB4CY	146.01	146.61		
CAROWINDS	AA4SC	147.78	147.18	N	
CHARLESTON	K4LWS	146.06	146.66	N	
CHARLESTON	K4ILT	146.16	146.76	N	PA
CHARLESTON	W4IVE	146.34	146.94	N	T
CHARLESTON	WB4LET	147.87	147.27		A
CHELSEA	KB4GY	146.01	146.61	N	
CHERAW	WD4HEH	147.735	147.135		
COL./GASTON	WB4NEP	144.61	145.21		EA
COLUMBIA	N4EOY	146.07	146.67		
COLUMBIA	WB4OCB	146.16	146.76		
COLUMBIA	K4AVU	146.28	146.88		

COLUMBIA	K4LNU	146.34	146.94		PA
COLUMBIA	K4AVU	147.81	147.21		
COLUMBIA	N4CZR	147.84	147.24	N	
COLUMBIA	WB4VLY	147.93	147.33		
COLUMBIA	K4LNU	147.96	147.36		A
DILLON/PEE DEE	NN4N	146.145	146.745		
FLORENCE	W4ULH	146.25	146.85		
FLORENCE	WA4ISM	146.37	146.97		PA
GOOSE CREEK	W4NAT	147.78	147.18	N	
GREENVILLE	W4AZT	146.10	146.70		A
GREENVILLE	WR4	147.675	147.075	N	PA
GREENWOOD	WB4UGA	147.765	147.165		PA
GREER	W4IQQ	146.34	146.94	N	
GRNVLE/CSRS HD	W4NYK	146.01	146.61		
GRNVLE/PARIS MT	W4NYK	146.22	146.82		PA
HODGES/GREENWOOD	KB4YF	144.53	145.13		
LANCASTER	W4PAX	146.10	146.70		
LANCASTER	WB4BGF	147.84	147.24		
LAURENS	WA4UZA	146.25	146.85	N	A
LEXINGTON	WR4AGK	147.255	146.835	N	
LONG MT	WA4JRJ	147.87	147.27	N	
LYMAN	KS4I	147.885	147.285		
MARION	W4YLT	146.40	147.00		EA
MONCKS CORNER	WA4DDK	147.75	147.15	N	A
MYRTLE BEACH	WD4JMT	146.01	146.61		A
MYRTLE BEACH	WA4YEE	147.72	147.12	N	
MYRTLE BEACH, N	WA4JYR	147.63	147.03	N	PA
N. AUGUSTA	K4FKJ	146.13	146.73		
N. AUGUSTA	K4VF	147.72	147.12	N	
NORTHWEST SECT.	W4GZL	144.51	145.11	N	P
ORANGEBURG	WR4AQY	147.69	147.09	N	A
PICKENS	WB4YXZ	146.40	147.00		A
ROCK HILL	WR4	144.71	145.31	N	
ROCK HILL	K4YTZ	146.43	147.03		PA
SIMPSONVILLE	WD4BJY	146.13	146.73		A
SIMPSONVILLE	WA4SDT	147.75	147.15	N	R
SPARTANBURG	K4JLA	147.69	147.09	N	PA
SUMMERVILLE	WR4AUV	146.19	146.79	N	
SUMMERVILLE	WB4LET	147.87	147.27	N	EA
SUMTER	WB4AFR	146.04	146.64		
SUMTER	WA4UMU	147.615	147.015		A
SUMTER	W4VFR	147.66	147.06	N	
WHITE HALL	W4BWZ	146.31	146.91		

220 MHZ

COLUMBIA	N4EOY	222.30	223.90		O
EASLEY/SASFRS MT	KJ4X	222.46	224.06		
PICKENS	WB4QHF	222.54	224.14		

440 MHZ

CHARLESTON	N4SC	449.10	444.509	N	T
COLUMBIA	KC4YI	449.10	444.10		
ROCK HILL	KA4RFA	442.25	447.25	N	

WEST VIRGINIA REPEATERS

TWO METERS

ALDERSON	WR8AKZ	146.13	146.73	N	
BECKLEY	WD8PQF	144.77	145.37	N	LA
BECKLEY	K8RO	146.34	146.94	N	O
BKLY/FLAT TOP MT	K8RO	146.25	146.85	N	A
BLUEFIELD	W8MOP	144.89	145.49		A
BLUEFIELD	WD8OGY	146.415	147.015		PA
BOLT MT	WB8LVH	144.57	145.17	N	L
BRIDGEPORT	WR8ALC	147.705	147.105	N	EA
BRIDGEPORT	K8VNQ	147.72	147.12		EAL
BUCKHANNON	K8WYH	146.25	146.85	N	
CHARLESTON	WR8AER	146.22	146.82	N	
CHARLESTON	WB8CQV	146.28	146.88	N	
CLARKSBURG	WB8ZVS	146.22	146.82		A
COAL MTN	WB8KAD	146.12	146.72	N	A
COTTAGEVILLE	WR8AKV	146.31	146.91	N	
DUNBAR	K8VKI	147.72	147.12		
ELKINS	WR8AOH	146.04	146.64	N	
FAIRMONT	W8SP	146.31	146.91		
FRANKLIN	W3RUA	147.945	147.345		
GRAFTON	K8VNQ	147.975	147.375		L
HUNTINGTON	WB8EZR	146.04	146.64	N	
HUNTINGTON	WR8AGH	146.16	146.76	N	A
HUNTINGTON	KA8BKX	147.90	147.30	N	
KINGSTON/LICK KB	W8FG	144.87	145.47		
LAYLAND/MANN MT	WB4	144.71	145.31	N	L
LEON	WB8NMT	147.78	147.18	N	
LOGAN	WD8KWC	144.63	145.23	N	
LOGAN	WA8ZLR	146.09	147.11	N	
LOGAN	WR8ADD	146.37	146.97	N	
MADISON	KA8JYR	146.06	147.06	N	TA
MARTINSBURG	WB8VUZ	147.855	147.255	N	
MCMECHEN	WA8ULB	146.31	146.91		
MCMECHEN	N8CFX	147.75	147.15		
MORGANTOWN	K8LG	144.83	145.43		
MORGANTOWN	WB8YZT	146.085	147.955	N	
MORGANTOWN	W8CUL	146.16	146.76		
MULLENS	WR8AKX	147.63	147.03	N	LA
NEW MARTINSVLLE	WR8ABY	146.34	146.94	N	
OAK HILL	W8GH	146.19	146.79		A
PARKERSBURG	WA8CRW	146.37	146.97		PA
PARKERSBURG	WD8AXY	147.96	147.36		
PARSONS	K8VNQ	144.73	145.33		PAL
PIE HORSE MT	N8APH	144.67	145.27	N	A
POINT PLEASANT	W8KNM	147.66	147.06	N	
PRINCETON	WB8NRK	146.46	147.06		A
RAVENSWOOD	WA8USO	146.07	146.67		
RAVENSWOOD	WA8USO	146.10	146.70	N	R
RICHWOOD	K8VKB	146.34	146.94		
SCOTT DEPOT	K8SLI	147.87	147.27	N	A
SPENCER	WA8SAK	146.01	146.61	N	
ST ALBANS	WB8GDY	146.40	147.00		
TERRA ALTA	WB8PHU	147.60	147.00		PA
WEIRTON	KC8JN	146.34	146.94		
WELCH	WB8SXZ	144.85	145.45		
WHEELING	W8YFX	144.59	145.19	N	
WHEELING	W8JDH	146.16	146.76	N	

220 MHZ

HUNTINGTON	KA8BKX	222.54	224.14	N	

440 MHZ

KINGSTON/LICK KB	KA8EMX	449.80	444.80	N	
MORGANTOWN	W8CUL	449.80	444.80		

GEORGIA REPEATERS

TWO METERS

ADAIRSVILLE	WB4LRA	146.085	146.685		
ALBANY	WR4ADM	146.10	146.70		
ALBANY	WR4ANB	146.22	146.82		
AMERICUS	WR4AQH	147.87	147.27		
ASHBURN	WA4NTF	144.63	145.23		
ASHBURN	K4QT	147.285	147.885		
ATHENS	WA4BKF	146.13	146.73		
ATHENS*	K4TQU	147.375	147.975		
ATLANTA GA TECH	W4AQL	147.66	147.06		
ATLANTA	W4VTA	144.51	145.11		C
ATLANTA	W4AQL	144.55	145.15		
ATLANTA	N4CLA	144.69	145.29		
ATLANTA	WB4LBM	144.71	145.31		
ATLANTA	WR4ABE	146.04	146.64		T
ATLANTA	W4DOC	146.22	146.82		
ATLANTA	WA4LOJ	146.34	146.94		C
ATLANTA	WR4ABC	146.37	146.97		
ATLANTA	WR4ARK	146.40	147.00		PA
ATLANTA	K4SMX	147.795	147.195		
ATLANTA	W4LUZ	147.855	147.255		
AUGUSTA	W4ALK	146.34	146.94		
AUGUSTA*	N4BMA	147.78	147.18		R
BALDWIN	WD4NHW	147.78	147.18		
BLAIRSVILLE	WA4EZN	147.70	147.10		
BRUNSWICK	K4TVE	146.13	146.73		
BUFORD	WD4JXR	147.075	147.675		P
BUFORD	WD4JXR	147.87	147.27		
CANTON	KE4PN	144.67	145.27		
CANTON	WB4ZCS	144.67	145.27		
CARROLTON	W4FWD	146.04	146.64		
CEDARTOWN	W4CMA	147.72	147.12		
CLEVELAND	K4FOW	144.69	145.29		
CLEVELAND	K4FOW	147.015	147.615		
CLOUDLAND	N4AHE	147.225	147.825		
COHUTTA-RTTY	W4KAU	146.46	147.06		R
COLUMBUS	WA4QHN	146.01	146.61		
COLUMBUS	N4BJZ	146.28	146.88		
COLUMBUS-RTTY	K4ACH	144.77	145.37		
CONYERS	WR4	146.925	146.325		
CONYERS	WD4JDM	147.81	147.21		
COVINGTON	WA4ASI	146.925	146.325		
CUMMING	W4BJT	144.81	145.41		
CUMMING	K4BYK	147.75	147.15		PA
DALLAS	K4DVJ	146.25	146.85		
DALTON	N4BZJ	144.63	145.23		

DALTON*	KA4WIZ	147.315	147.915	
DECATUR	WB4CPL	144.75	145.35	
DOUGLASVILLE	KB4EO	147.96	147.36	
DUBLIN	WA4HZX	147.96	147.36	
FOLKSTON	K4DMK	146.19	146.79	
FOREST PARK	K4KQK	144.65	145.25	
FORSYTH	WR4AQA	147.315	147.915	
GAINESVILLE	WD4IWJ	146.31	146.91	
GAINESVILLE*	W4NSO	146.07	146.67	A
GRIFFIN	WB4GWA	144.79	145.39	
GRIFFIN	WR4AIV	146.31	146.91	
GRIFFIN	WR4AEA	146.43	147.43	
HAMILTON	WB4ULJ	144.59	145.19	
HAMILTON	WD4MJV	146.835	146.235	
HAPEVILLE	WR4ABN	147.63	146.03	
HARTWELL*	KY4T	146.895	146.295	A
IRWINTON	WB4NFG	147.84	147.24	
JASPER	W4COM	146.10	146.70	
JESUP	WA4EQL	146.07	146.67	
JONESBORO	WR4	144.61	145.21	
JONESBORO	WA4OGE	144.73	145.33	
JONESBORO	W4BOC	144.85	145.45	
KENNESAW	WB4UPC	144.83	145.43	
LAGRANGE	WR4	146.40	147.00	
LAGRANGE	WB4BXO	147.93	147.33	
LYONS	K4HAO	146.22	146.82	
MACON	WB4OLL	144.83	145.43	
MACON	W4BKM	146.06	146.66	
MACON	K4IIA	147.66	147.06	
MARIETTA	WB4KJB	146.13	146.73	
MARIETTA	W4BTI	146.28	146.88	
METTER	W4TYM	147.645	147.045	
MILLEDGEVILLE	KA4WDF	144.51	145.11	A
MILLEDGEVILLE	WB4DOJ	146.10	146.70	
MOULTRIE	WD4KOW	146.19	146.79	
NEWNAN	K4SEX	146.19	146.79	
PRESTON	W4TOV	146.385	146.985	
QUITMAN	WA4NKL	146.28	146.88	
RINGGOLD	WR4ABZ	146.715	146.115	
ROME	W4VO	146.34	146.94	
ROME	K4HNM	147.30	147.90	
ROSWELL	N4CLA	144.87	145.47	
SANDY SPRINGS	WB4CPL	144.75	145.35	
SANDY SPRINGS	WA4NNO	146.40	147.00	
SAVANNAH	K4NLX	144.63	145.23	
SAVANNAH	WD4AFY	144.77	145.37	
SAVANNAH	K4NLX	146.10	146.70	PA
SAVANNAH	WR4AVO	147.63	147.03	
SAVANNAH*	W4HBB	146.28	146.88	
SAVANNAH*	W4HBB	146.37	146.97	A
SMYRNA	WA4YUR	144.61	145.21	
STATESBORO	K4MEF	147.81	147.21	
STONE MTN	W4BOC	146.16	146.76	
SVR CRK/MT ALTO	K4HNM	147.90	147.30	
SWAINSBORO	K4VYX	146.19	146.79	
SYLVESTER	W4MM	146.13	146.73	
THOMASTON	K4IMK	147.99	147.39	
THOMASVILLE	K4UFM	147.66	147.06	
TOCCOA*	KA4DIP	147.93	147.33	
VALDOSTA	W4APS	146.16	146.76	
VALDOSTA	WA4SMH	147.135	147.735	
VIENNA	WA4RWS	144.89	145.49	
WARNER ROBBINS	WB4BDP	146.01	146.61	
WARNER ROBBINS	W4HON	146.25	146.85	
WARNER ROBBINS	WR4AZP	147.90	147.30	
WAYCROSS	WR4AMK	146.04	146.64	
WEST BROW	KC4EV	147.81	147.21	N
WRIGHTSVILLE	WA4RVB	146.34	146.94	

220 MHZ

ATLANTA	KK4C	223.22	224.82	PA
CANTON	WB4UPC	222.34	223.94	
CANTON	WB4UPC	223.06	224.66	
KENNESAW	WB4UPC	222.52	224.12	
KENNESAW	WB4UPC	223.34	224.94	

440 MHZ

ALBANY	WA4GKI	439.25	427.25	V
BUCKHEAD	WA4YNZ	444.60	449.60	
COLUMBUS	WA4QHN	449.20	444.20	
KENNESAW	WB4IXF	449.50	444.50	
STONE MTN	W4BOC	444.25	449.25	
WARNER ROBBINS	WD4ASB	444.50	449.50	

SIX METERS

MARIETTA	WB4UPC	53.05	52.05	

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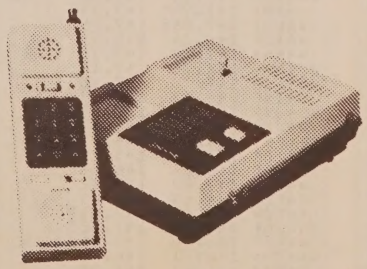
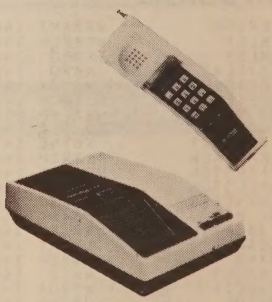


Sidney Rickenbaker,
N4CLQ



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2 METERS

ALTAMONTE	WD4RMN	147.885	147.285
ARCADIA	W4MIN	147.675	147.075
BELLE GLADE	W4MML	144.85	145.45
BELLE GLADE	AI4C	147.60	147.00
BOCA RATON	WB4CFY	146.22	146.82
BOCA RATON	WA4WNE	146.265	146.865
BRADENTON	KC4VA	146.01	146.61
BRADENTON	K4WV	146.22	146.82
BRADENTON	K4FQM	146.325	146.925
BRADENTON	WA4RYY	147.69	147.09
BRANDON	WB4BLM	147.765	147.165
BRANDON	WD4AGM	147.99	147.39
BROOKSVILLE	WR4AKR	146.115	146.715
CALLAHAN	KA4ALL	146.205	146.805
CALLAHAN	WD4MDK	146.40	147.00
CLEARWATER	N4EGA	144.75	145.35
CLEARWATER	WB4RZF	144.83	145.43
CLERMONT	W4JYE	147.78	147.18
COCOA BEACH	WR4AFI	146.43	147.03
COCOA	WR4AFI	146.28	146.88
COOPER CITY	W4FLA	144.71	145.31
CORAL GABLES	W4BBX	147.84	147.24
CRESTVIEW	WB4CDR	147.96	147.36
CROSS CITY	W4RTN	146.145	146.745
CRYSTAL RIVER	W4CF	147.87	147.27
CUDJOE KEY	K3ML	147.66	147.06
DAYTONA BEACH	KA4UZY	144.89	145.49
DAYTONA BEACH	WR4ALC	146.235	146.835
DAYTONA BEACH	WB4FKL	146.34	146.94
DAYTONA BEACH	WR4AKH	147.75	147.15
DAYTONA BEACH	WB4TVE	147.81	147.21
DAYTONA BEACH	N4FKW	147.84	147.24
DEERFIELD BEACH	WA2UGG	147.705	147.105
DEFUNIAK SPRINGS	W4WNY	147.21	147.81
DUNEDIN	KO4J	147.90	147.30
ENGLEWOOD	WR0GUX	146.10	146.70
ENGLEWOOD	KO0GF	146.175	146.775
ENGLEWOOD	WR0KW	146.34	146.94
EUSTIS	K4ISH	144.69	145.29
EUSTIS	NS4A	146.295	146.895
EUSTIS	WR4ARU	147.855	147.255
FERNANDINA BCH	N4RAA	146.01	146.61
FT LAUDERDALE	WR4AYC	144.51	145.11
FT LAUDERDALE	N4AIV	144.610	145.210
FT LAUDERDALE	WB4LAH	144.63	145.23
FT LAUDERDALE	KA4SEJ	144.81	145.41
FT LAUDERDALE	AC4K	146.205	146.64
FT LAUDERDALE	N4GDV	146.31	146.91
FT LAUDERDALE	WB4HAG	146.355	146.955
FT LAUDERDALE	WB4MWW	146.43	147.03
FT LAUDERDALE	WA4IOJ	147.735	147.135
FT MYERS	WB4YJG	144.615	145.79
FT MYERS	K4VGN	146.235	146.835
FT MYERS	KC4DT	146.28	146.88
FT MYERS	WD4MTC	147.825	147.225
FT PIERCE	KD4GF	146.13	146.73
FT PIERCE	KD4GF	146.175	146.775
FT PIERCE	WA4MLD	147.81	147.21
FT WALTON BCH	W4LRC	146.19	146.79
FT WALTON BCH	W4MTD	146.28	146.88
FT WALTON BCH	W4RH	147.60	147.00
GAINESVILLE	N4AIV	144.73	145.33
GAINSVILLE	WB4IJR	146.19	146.79
GAINSVILLE	K4DPZ	146.22	146.82
GAINSVILLE	KA4ATR	146.265	146.865
GAINSVILLE	WA4SCD	146.295	146.895
GAINSVILLE	WA4JXI	147.645	147.045
GAINSVILLE	K3YAN	147.705	147.105
GAINSVILLE	KB4HF	147.975	147.375
GOLDEN GATE	WD4EEF	147.945	147.345
GULF BREEZE	W4GMS	147.765	147.165
HALLANDALE	WD4FDW	144.85	145.45
HALLANDALE	W4YU	146.25	146.85
HIALEAH	WB4INA	146.205	146.805
HOLIDAY	WA4L	144.71	145.31
HOLLYWOOD	K2YRJ	144.085	144.685
HOLLYWOOD	WA4WHD	146.10	146.70
HOLLYWOOD	WB4TON	146.385	146.985
HOLLYWOOD	W4WJ	147.93	147.33
HOMESTEAD	WA5VJ	146.025	146.835
HOMESTEAD	KD4BVC	146.40	147.00
HUDSON	K4EAB	146.205	146.805
JACKSONVILLE BCH	WA4KKY	146.01	146.61
JACKSONVILLE	KA4TAR	144.83	145.43
JACKSONVILLE	WR4AMT	146.04	146.64
JACKSONVILLE	WB4MBU	146.10	146.70
JACKSONVILLE	WA4KKY	146.13	146.73
JACKSONVILLE	ND4A	146.16	146.76
JACKSONVILLE	WR4AKP	146.175	146.775
JACKSONVILLE	ND4A	146.28	146.88
JACKSONVILLE	KA4IUC	146.325	146.925
JACKSONVILLE	WB4NCZ	147.69	147.09
JACKSONVILLE	N4UFE	147.795	147.195
JACKSONVILLE	WR4APN	147.825	147.075
JACKSONVILLE	WR4AQT	147.90	147.30
JACKSONVILLE	K4YLX	147.99	147.39
JUNO BEACH	WR4APJ	147.84	147.24
JUPITER	N4BBZ	146.025	146.625
JUPITER	N4BBZ	147.765	147.165
KEY WEST	WA1LO	146.34	146.94
KEYSTONE HTS	WD4EPK	146.385	146.985
LAKE CITY	W4YRR	147.735	147.135
LAKE PARK	W4UZJ	147.675	147.075
LAKE PLACID	WB4QQK	147.645	147.045
LAKE WALES	WR4AND	147.93	147.33
LAKELAND	N4CKE	146.085	146.685
LARGO	WD4SCD	144.73	145.33
LARGO	W4DPH	146.37	146.97
LECANTO	W4IIR	146.355	146.955
LIVE OAK	K4BZS	146.34	146.94
LONGWOOD	KR4Q	147.915	147.015
MARATHON	K4OFG	147.855	147.255
MARIANNA	W4BKD	146.07	146.67
MELBOURNE	WR4AMJ	146.01	146.61
MELBOURNE	WR4ABK	146.385	146.985
MELBOURNE	K4YWC	146.40	147.00
MELBOURNE	W4JHM	147.705	147.105
MERRITT ISL	K4GCC	146.34	146.94
MIAMI BCH	N4AXQ	147.81	147.21
MIAMI BEACH	W4FQM	147.78	147.18
MIAMI	WR4VMU	144.53	145.13
MIAMI	WR4BQD	144.59	145.19
MIAMI	WD4RXD	144.59	145.19
MIAMI	NC4M	144.65	145.25
MIAMI	AK4Y	144.67	145.27
MIAMI	KA4BMA	144.75	145.35
MIAMI	N4DUV	144.79	145.39
MIAMI	WD4NLG	144.81	145.41
MIAMI	KA4DFX	144.83	145.43
MIAMI	WR4ASN	144.87	145.47
MIAMI	KA4QQO	144.89	145.49
MIAMI	WD4NLG	146.13	146.73
MIAMI	WD4SFG	146.16	146.76
MIAMI	WA4ARD	146.325	146.925
MIAMI	WC4ACT	146.34	146.94
MIAMI	W4BKZ	146.37	146.97
MIAMI	WR4AFN	146.46	147.06
MIAMI	N4AEN	147.615	147.015
MIAMI	WR4AHN	147.69	147.09
MIAMI	WA4TCE	147.72	147.12
MIAMI	WR4AWF	147.75	147.15
MIAMI	WR4BDC	147.87	147.27
MIAMI	WB4ESB	147.90	147.30
MIAMI	WR4DTC	147.945	147.345
MIAMI	WR4DXX	147.975	147.375
MIAMI	WA4LPT	147.99	147.39
MILTON	AA4PT	144.89	145.49
MILTON	N4BWR	146.10	146.70
MILTON	W4TGD	147.69	147.33
NAPLES	WR4ANC	146.07	146.67
NAPLES	WB4ZEI	146.10	146.70
NAPLES	WR4FUS	147.63	147.03
NEW PORT RICHEY	WA4AGX	146.025	146.625
NEW PORT RICHEY	WA4GDN	146.07	146.67
NICEVILLE	KA4EPC	146.13	146.73
OCALA	K4GSO	146.01	146.61
OKEECHOBEE	W4OGJ	147.795	147.195
ORANGE CITY	N4ODT	147.915	147.315
ORANGE PARK	WB4CGD	146.07	146.67
ORLANDO	KC4CT	144.51	145.11
ORLANDO	WB4TCW	146.04	146.64
ORLANDO	W4DHL	146.10	146.70
ORLANDO	WR4AFO	146.16	146.76
ORLANDO	KY4F	146.22	146.82
ORLANDO	KC4ZG	147.63	147.03
ORLANDO	WR4AJR	147.69	147.09
ORLANDO	KC4CB	147.72	147.12
ORLANDO	WR4AEL	147.825	147.225
ORLANDO	WR4AXT	147.99	147.39
PAHOKEE	K4SJA	144.65	145.25
PALATKA	K4DXL	147.69	147.09
PALATKA	KA4GIJ	147.93	147.33
PALM BAY	WA4VME	144.63	145.23
PALM BAY	WR4AMJ	146.25	146.85
PALM HARBOR	WA4ODF	147.75	147.15
PALM SPGS NO	WA4TPD	147.63	147.03
PANAMA CITY	K4PMO	146.34	146.94
PANAMA CITY	WB4SHN	147.99	147.39
PENSACOLA	WA4UAJ	144.51	145.11
PENSACOLA	WR4ACZ	146.16	146.76
PENSACOLA	WR4BDF	146.25	146.85
PENSACOLA	WR4AIK	146.34	146.94
PERRY	W4RTN	146.37	146.97
PINELLAS PARK	WD4KEZ	144.85	145.45
PINELLAS PARK	N4HAY	146.22	146.85
PLANT CITY	WA4BYK	144.56	145.16
PLANT CITY	WR4ANM	144.87	145.47
PLANTATION KEY	WA4OUI	146.115	146.715
PLANTATION	W2GDG	144.77	145.37
PLANTATION	WA4LZR	146.19	146.79
POMPANO BEACH	WR4UFA	146.01	146.61
POMPANO BEACH	WB4UFA	146.01	146.61
PORT ST JOE	W4WEB	147.87	147.27
PUNTA GORDA	WD8JPF	147.615	147.015
RIVERVIEW	N4BZ	144.59	145.19
ROCKLEDGE	WD4NQK	147.735	147.135
RUSKIN	WB4YRW	147.705	147.105
SAN ANTONIO	WR4APC	146.28	146.88
SAN PATEO	WA4OCP	146.06	146.66
SANFORD	N4CQG	144.77	145.37
SANFORD	WR4CGW	146.13	146.73
SARASOTA	WR4AUP	144.53	145.13
SARASOTA	WR4AUP	146.13	146.73
SARASOTA	WR4WUV	147.69	147.09
SEBRING	KA4LVE	144.71	145.31
SEMINOLE	K3GGX	146.10	146.70
SINGER ISL	WD4LGT	144.57	145.17
SPRING HILL	AK1E	147.795	147.195
ST AUGUSTINE	K4ZED	146.026	146.625
ST CLOUD	W4SJE	146.19	146.79
ST PETERSBURG	N4DOR	144.51	145.11
ST PETERSBURG	N4OS	144.61	145.21
ST PETERSBURG	K4KE	147.60	147.00
ST PETERSBURG	K4SCL	147.66	147.06
ST PETERSBURG	WA4FYR	147.885	147.285
ST PETERSBURG	WA4CHS	147.945	147.315
ST PETERSBURG	W4LJY	147.96	147.36
STUART	K4NTA	146.64	147.06
SUNRISE	WD4NXL	144.69	145.29
TALLAHASSEE	AE4S	146.055	146.655
TALLAHASSEE	W4GAA	146.115	146.715
TALLAHASSEE	WD4HWF	146.31	146.91
TALLAHASSEE	K4MZA	147.63	147.03
TAMPA	K4RCU	144.67	145.27
TAMPA	AD3B	144.81	145.41
TAMPA	KO4J	144.89	145.49
TAMPA	WA4SWC	146.04	146.64
TAMPA	AD3B	146.16	146.76
TAMPA	W4TTW	146.235	146.835
TAMPA	WB4MIA	146.265	146.865
TAMPA	K4WSR	147.63	147.03
TAMPA	K4SDV	147.81	147.21
TAMPA	KO4J	147.84	147.24
TAMPA	N4CQU	147.945	147.345
TAMPA	WA4NGH	147.975	147.375
TAVARES	N4CQG	144.79	145.39
TITUSVILLE	WB4IFH	146.07	146.67
TITUSVILLE	K4VTY	146.31	146.91
TITUSVILLE	K4DII	146.37	146.97
VERO BEACH	K4OM	146.04	146.64
W PALM BEACH	WA4ARF	146.07	146.67
W PALM BEACH	WR4AIS	146.10	146.70
W PALM BEACH	WB4FPB	146.145	146.745
W PALM BEACH	WB4FPB	146.28	146.88
W PALM BEACH	WR4AIT	146.37	146.97
W PALM BEACH	KA4EPS	147.885	147.285
W PALM BEACH	KA4NOF	147.96	147.36
WALDO	KE4VY	147.765	147.165
WEWAHITCHKA	K4LQO	147.90	147.30
WINTER GARDEN	WA4LUM	147.945	147.345
WINTER HAVEN	WR4AUT	146.055	146.655
WINTER SPRINGS	WA2KWD	146.625	146.025
ZEPHYR HILLS	W4POP	144.63	145.23

220 MHZ

CLEARWATER	WB4PZF	223.34	224.94
CLEARWATER	W4DPH	223.38	224.98
CRESTVIEW	WB4CDR	223.22	224.82
EGLIN AFB	WA4NN	222.34	223.94
FT LAUDERDALE	WB4MWW	223.30	224.90
HIALEAH	WB4INA	222.90	224.50
HIALEAH	WA4TPW	222.98	224.58
HIALEAH	WR4BDH	223.26	224.86
HOLIDAY	WA4L	222.90	224.50
HOLLYWOOD	WD4CLZ	222.82	224.42
JACKSONVILLE BCH	WA4KKY	223.34	224.94
JACKSONVILLE	KA4IUC	222.34	223.94
JACKSONVILLE	WR4AQT	222.34	224.50
KATHLEEN	N4ADN	223.02	224.62
KEY LARGO	WD4NEZ	222.94	224.54
LAKELAND	KF4Y	222.38	223.98
LAKELAND	W4NY	223.10	224.70
LARGO	WB4JVD	222.94	224.54
MARGATE	WA4CQR	222.42	224.02
MARGATE	WA2NAV	222.46	224.06
MIAMI BEACH	NC4M	222.80	224.46
MIAMI BEACH	WA4LWN	223.14	224.74
MIAMI	WR4ASN	222.34	223.94
MIAMI	WD4GZL	222.38	223.98
MIAMI	WB4IVM	222.46	224.06
MIAMI	WA2MMN	222.54	224.14
MIAMI	WD4NJD	222.58	224.18
MIAMI	WA4TCE	223.02	224.62
MIAMI	WB4ESB	223.06	224.66
MIAMI	WB4NBT	223.10	224.70
MIAMI	KA4HWE	223.18	224.78
MIAMI	WR4RCR	223.22	224.82
MIAMI	WR4AKZ	223.34	224.94
MIAMI	WB4YMU	223.38	224.98
MILTON	K4VDD	223.10	224.70
ORLANDO	WB4NK	223.20	224.94
ORLANDO	WB4NK	223.34	224.94
PENSACLCA	WA4KST	223.34	224.94
POMPANO BEACH	WA4IV	222.62	224.22
PUNTA GORDA	WD8JPF	222.82	224.42
ST PETERSBURG	K4TJY	222.34	223.94
ST PETERSBURG	K4SCL	223.06	224.66
ST PETERSBURG	WR4AWX	223.26	224.86
ST PETERSBURG	WA4APR	223.30	224.90
TALLAHASSEE	WR4AUG	222.62	224.22
TAMPA	KO4J	222.62	224.22
TAMPA	WB4AKA	222.98	224.58
TAMPA	W4WWW	223.14	224.74
TAMPA	KB4VD	223.18	224.78
TAMPA	KA4HRF	223.38	224.98
VALRICO	AA4WJ	222.94	224.54
VERO BEACH	WA4ASJ	222.34	223.94
W PALM BEACH	WB4JFE	222.58	224.18
W PALM BEACH	WD4KSO	222.74	224.34
WINTER PARK	KC4CB	222.86	224.46

440 MHZ

BOCA RATON	WA1UZE	444.45	449.45
BOCA RATON	WD4OYT	444.60	449.60
BOCA RATON	WA1UZE	447.75	442.75
BOCA RATON	WB4OFY	449.30	444.30
BRADENTON	WR4AWL	448.25	443.25
CAROL CITY	WR4BDH	448.90	443.90
CRAWFORD	W4DPH	444.25	449.25
CORAL GABLES	N4BKZ	444.60	449.60
ELGIN AFB	WD4JEJ	444.10	449.10
ELLENTON	K4DYB	449.30	443.30
FT LAUDERDALE	WR4AYC	439.25	427.25
FT LAUDERDALE	WD4AFA	442.45	447.45
FT LAUDERDALE	WB4HAG	444.10	449.10
FT LAUDERDALE	WB4MWW	447.10	442.10
FT LAUDERDALE	WB4RZS	447.20	442.20
FT LAUDERDALE	WA4VQJ	447.40	442.40
FT LAUDERDALE	WA4IPU	447.60	442.60
FT LAUDERDALE	WB4IRG	447.70	442.70
FT LAUDERDALE	WD4IYS	448.25	443.25
FT LAUDERDALE	K4HIF	448.30	443.30
FT LAUDERDALE	WR4AYC	448.85	443.85
FT LAUDERDALE	WR4AYC	449.30	444.30
FT LAUDERDALE	WB9CMP	449.375	444.375
FT LAUDERDALE	N4GDV	449.775	444.775
FT LAUDERDALE	N4GDV	449.825	444.825
FT LAUDERDALE	K4FMX	449.975	444.975
HIALEAH	KA4GAG	439.25	426.25
HIALEAH	WR4BDH	443.80	448.80
HIALEAH	WB4INA	444.55	449.55
HIALEAH	WD4EIH	444.80	449.80
HOLLYWOOD	WA4WHD	444.675	449.675
HOLLYWOOD	WD4CLZ	449.65	444.65
HOMESTEAD	KA4WJP	444.05	449.05
JACKSONVILLE	KA4IUC	444.50	449.50
JACKSONVILLE	WR4AMR	447.10	442.10
JACKSONVILLE	WR4AAF	449.00	444.00
LAKE WORTH	VE3DGY	448.30	443.30
MELBOURNE	WR4AEE	439.25	425.25
MELBOURNE	WR4ABK	448.80	443.80
MIAMI BEACH	W4FQM	444.15	449.15
MIAMI	WR4AFN	443.225	448.225
MIAMI	WD4RCH	444.25	449.25
MIAMI	KA4DFX	444.425	449.425
MIAMI	WD4NLG	447.15	442.15
MIAMI	WB4TTZ	447.30	442.30
MIAMI	WB4ZHP	447.40	442.40
MIAMI	WH6M	448.15	443.15
MIAMI	WD4NAN	448.35	443.35
MIAMI	KB4ES	448.40	443.40
MIAMI	KA4BIY	448.50	443.50

FLORIDA

MIAMI	WD4MTW	448.60	443.60
MIAMI	WR4BCR	448.75	443.75
MIAMI	WB4IVM	448.95	443.95
MIAMI	WB4ESP	449.00	444.00
MIAMI	KP4DJT	449.20	444.20
MIAMI	KP4DJT	449.525	444.525
MIAMI	KA4SEJ	449.725	444.725
N LAUDERDALE	WA2EGO	448.55	443.55
ORLANDO	KC4CT	443.20	448.20
ORLANDO	KC4ZQ	443.30	448.30
ORLANDO	WB4CGW	444.10	449.10
ORLANDO	WR4AXZ	444.50	449.50
ORLANDO	KC4CB	444.85	449.85
ORLANDO	KY4F	444.90	449.90
ORLANDO	WA9RCH	444.975	449.975
PALATKA	WB4EQT	448.00	443.00
PALATKA	WD8AKS	449.75	444.75
PALATKA	WD8AKS	449.775	444.775
PALM BEACH	WD4KSO	449.35	444.35
PANAMA CITY	K4LIX	444.10	449.10
PEMBROKE PINE	W4LOB	448.05	443.05
PINELLAS PARK	WD4KEZ	444.45	449.45
PLANT CITY	WR4ANM	449.00	444.00
PLANTATION	WA4LZR	448.00	443.00
PLANTATION	WA4LZR	449.70	444.70
POMPANO BEACH	N4AIV	447.25	442.25
PUNTA GORDA	WD8JPF	448.75	443.75
RIVERVIEW	N4BZ	449.80	444.80
SARASOTA	WD4BAJ	448.90	443.90
SARASOTA	WR4AUP	449.70	444.70
ST PETERSBURG	KO4J	449.20	444.20
TALLAHASSEE	AE4S	448.85	449.85
TAMPA	WA4SWC	443.775	448.775
TAMPA	KO4J	444.35	449.35
TAMPA	K5FDG	444.40	449.40
TAMPA	W4EFK	444.60	449.60
TAMPA	W4ATY	444.90	449.90
TAMPA	KO4J	448.00	443.00
TAMPA	WB4AKA	448.40	443.40
TAMPA	AD3R	448.50	443.50
TAMPA	WA4PHM	448.55	443.55
TAMPA	WR4AKA	448.80	443.40
TARPON SPRINGS	WA4DDF	443.80	448.80
TITUSVILLE	WR4LDE	444.15	449.15
W PALM BEACH	WB4ILH	449.50	444.50
W PALM BEACH	WR4AIT	444.75	449.75
W PALM BEACH	WB4EPB	448.45	443.45
W PALM BEACH	KA4EPS	449.85	444.85
WINTER SPRINGS	WA2KWO	444.60	449.60

10 METERS

TAMPA	WD4MRW	29.54	29.64

6 METERS

EUSTIS	N4AGL	52.05	53.05
FT LAUDERDALE	WR4MHW	52.73	53.73
GAINSVILLE	WR4FSQ	52.01	53.01
MIAMI	KB4ES	52.17	53.17
MIAMI	AC4K	52.48	52.68
MIAMI	WR4ASN	52.65	53.65
PALATKA	WD8ARS	52.43	53.43
PENSACOLA	WR4RDF	52.05	53.05
PLANT CITY	WR4ANM	52.13	53.13
SHELL POINT	WA4ISJ	52.67	53.67
ST PETERSBURG	KA2EGA	52.03	53.03
ST PETERSBURG	W4APV	52.55	53.55
TALLAHASSEE	WR4	52.76	52.525
TAMPA	KO4J	52.35	53.35

ALABAMA REPEATERS

2 METERS

ALBERTVILLE	K4WSS	146.16	146.76
ALEXANDER CITY	WA4KIK	146.37	146.97
ANDALUSIA	WR4AFF	146.34	146.94
ASHEVILLE	WR4AQS	147.81	147.21
ATHENS	WR4AKD	146.55	147.15
AUBURN	K4RY	147.84	147.24
BAY MINETTE	K4JIE	146.01	146.61
BIRMINGHAM	K4QTQ	144.55	145.15
BIRMINGHAM	K4QHW	144.75	145.35
BIRMINGHAM	K4IR	144.81	145.41
BIRMINGHAM	WR4ACB	146.16	146.76
BIRMINGHAM	WB4SGI	146.28	146.88
BIRMINGHAM	W4CUE	146.34	146.94
BIRMINGHAM	W4EVO	146.43	147.03
BIRMINGHAM	K4TWJ	146.655	146.055
BIRMINGHAM	N4YZ	146.985	146.385
BIRMINGHAM	KA4EIR	147.285	147.885
BIRMINGHAM	WR4AXA	147.63	147.03
BIRMINGHAM	WR4AZG	147.75	147.15
BIRMINGHAM	WA4MHO	147.93	147.33
BLACK	K4LYY	147.81	147.21
BOAZ	K4CWD	147.66	147.06
BREWTON (EAST)	WR4BAE	146.37	146.97
CHEROKEE-BARTON	K4YVY	146.16	146.76
CLANTON	WR4AYJ	146.19	146.79
CULLMAN	WR4ASY	146.25	146.85
DECATUR	W4ATD	146.13	146.73
DECATUR	W4ATD	146.40	147.00
DEMOPOLIS	WR4AJN	146.04	146.64
DOTHAN	N4AN	146.25	146.85
ENTERPRISE	WD4ROJ	147.84	147.24
EUFAULA	WA4AKA	146.10	146.70
EVERGREEN	WR4ALR	146.31	146.91
FAIRHOPE	WA4NWE	146.10	146.70
FAYETTE	K4ACL	147.63	147.03
FLORALA	WD4DWK	147.66	147.06
FLORENCE	WR4NQH	146.22	146.82
FLORENCE	WA4TEN	146.28	146.88
FLORENCE(UALA)	WR4SRG	146.31	146.91
FORT PAYNE	W4RNX	147.87	147.27
GADSEN	W4DEN	146.22	146.82
GRADY	W4AP	147.78	147.18
GREENVILLE	K4TNS	146.07	146.67
GROVE HILL	WB4THU	147.87	147.27
GULF SHORES	WR4DWS	146.04	146.64
GUNTERSVILLE	K4VQJ	147.165	146.565
HALEYVILLE	K4KQE	146.19	146.79
HAPILTON	WA4RNN	146.37	146.97
HAPILTON	WA4RNN	146.985	146.385
HARTSELLE	WR4BDR	146.805	146.205
HEADLAND	WA4QER	146.16	146.76
HUNTSVILLE	WR4AIU	144.83	145.43
HUNTSVILLE	K4IQU	146.34	146.94
HUNTSVILLE	K4RSB	147.225	147.825
HUNTSVILLE	WB4LDT	147.78	147.18
HUNTSVILLE	WR4AVG	147.90	147.30
JACKSONVILLE	WD4KTY	147.375	147.975
JASPER	WR4AFP	146.04	146.64
JASPER	WR4ASM	146.10	146.70
JASPER	WR4ACB	146.31	146.91
LANETT	K4DXZ	147.60	147.00
LEXINGTON/ANDSN	WR4AYZ	147.84	147.24
LINCOLN	KA4DQZ	144.89	145.49
MOBILE	W4YXC	146.13	146.73
MOBILE	WR4AHQ	146.22	146.82
MOBILE	WB4BXM	146.34	146.94
MOBILE	WR4DCL	147.66	147.06
MOBILE	WA4HFL	147.90	147.30
MONTGOMERY	W4DE	146.16	146.76
MONTGOMERY	WB6GDM	146.25	146.85
MONTGOMERY	WR4AUT	146.31	146.91
MONTGOMERY	WR4AJH	146.40	147.00
MONTGOMERY	WR4AHZ	147.87	147.27
MT CHEAPA	K4RQP	147.69	147.09
MUSCLE SHOALS	W4JNB	146.01	146.61
MUSCLE SHOALS	WB4NQH	146.715	146.115
MUSCLE SHOALS	WR4DIN	147.945	147.345
OPELIKA	W4ZBA	147.195	147.795
OPELIKA	W4ZBA	147.72	147.12
OPELIKA	WB4KNN	147.90	147.30
OPP	WR4AKM	146.04	146.64
OXFORD	WR4AVM	146.10	146.70
PELL CITY	W4DWS	146.01	146.61
PHENIX CITY	WR4BBB	146.01	146.61
PHENIX CITY	N4RJZ	146.28	146.88
RIVERSIDE	WR4AQS	147.81	147.21
ROANOKE	K4JTN	146.865	146.265
SCOTTSBORO	WR4AUZ	146.31	146.91
SELMA	W4NCK	146.13	146.73
SELMA	WR4AXP	147.96	147.36
STEELE	W4OEN	146.07	146.67
STEVENSON	WA4KBB	147.96	147.36
TALLADEGA	W4GBQ	147.96	147.36
TEXASVILLE	W4ICO	146.19	146.79
THOMASVILLE	WA4GNA	147.60	147.00
TROY	WR4AHH	146.22	146.82
TUSCALOOSA	WR4AER	146.22	146.82
TUSCALOOSA	WA4QAZ	146.37	146.97
TUSCALOOSA	KX4I	147.66	147.06
TUSKEGEE	WR4ASH	146.07	146.67
VERNON	WB4TLC	146.07	146.67
WARRIER	WB4YOX	144.85	145.45
WETUMPKA	W4AP	146.04	146.64
WETUMPKA	WR4AZL	146.445	147.045
WETUMPKA	WA4MTG	147.645	147.045
WETUMPKA	WA4MTG	147.945	147.045
WILSONVILLE	N4YZ	146.985	146.385
WINFIELD	KG4X	146.955	146.355

DELAWARE

2 METERS

BETHANY BEACH	W3HTR	147.78	147.18
DOVER	W3HZW	146.37	146.97
DOVER	W3HZW	147.795	147.195
MILLSBORO	K3JL	147.675	147.075
NEWARK	WR3ACV	146.10	146.70
NEWARK	WB3JTK	146.355	146.955
WILMINGTON	WR3ABA	146.13	146.73
WILMINGTON	WA3QLS	147.825	147.225

220 MHZ

WILMINGTON	WB3DPJ	222.40	224.00
WILMINGTON	AD3M	222.94	224.54

MARYLAND

2 METERS

ADELPHI	WB3FRW	144.77	145.37
ANNAPOLIS	W3VRD	144.73	145.33
ASHTON	WR3AFT	146.40	147.00
BALTIMORE	K3SP	146.07	146.67
BALTIMORE	W3DID	147.63	147.03
BALTIMORE	W3BPX	147.885	147.285
BEL AIR	K3GUX	146.175	146.775
BETHESDA	K3YGG	144.69	145.29
CHELTENHAM	WA3DPC	147.75	147.15
CHEVERLY	WR3ABC	146.01	146.61
COLLEGE PARK	W3FAX	144.89	145.49
COLUMBIA	K3CUJ	147.735	147.135
COLUMBIA	WR3AGP	147.99	147.39
CROWNSVILLE	WR3ACL	146.10	146.70
CUMBERLAND	WA3IIJ	144.85	145.45
CUMBERLAND	WR3AGI	146.28	146.88
DAVIDSONVILLE	WR3AJP	147.705	147.105
E. BALTIMORE	WR3AFI	147.84	147.24
EASTON	WA3GVI	146.445	147.045
FREDERICK	WR3ABL	146.13	146.73
FREDERICK	WA3CHI	147.66	147.06
FROSTBURG	K3CCC	147.99	147.39
GAITHERSBURG	WR3AKP	146.355	146.955
GLEN ARNIE	WA3PJQ	146.205	146.805
GREENBELT	W3ZM	146.235	146.835
GREENBELT	W3MZG	146.28	146.88
HAGERSTOWN	W3CWC	146.34	146.94
HAGERSTOWN	K3UMV	147.69	147.09
HAVRE DE GRACE	K3UAB	146.25	146.85
JESSUP	WA3DZD	146.16	146.76
LEXINGTON PARK	WR3ACP	146.04	146.64
LEXINGTON PARK	W3NET	146.265	146.865
LUTHERVILLE	K3WCL	144.61	145.21
N. BALTIMORE	WA3KOK	146.34	146.94
OCEAN CITY	W3HTR	147.78	147.18
POTOMAC	WR3ACF	147.87	147.27
ROCKVILLE	W3RCN	144.65	145.25
ROCKVILLE	WR3ABM	146.04	146.64
SALISBURY	WA3RDW	146.22	146.82
SALISBURY	WA3YII	146.385	146.985
SILVER SPRING	WR3AEO	147.78	147.18
W. BALTIMORE	WR3AGS	147.945	147.345
WASHINGTON DC	WR3AKO	147.99	147.39
WESTMINSTER	K3PZN	144.81	145.41

220 MHZ

DAMASCUS	WR3AHS	222.98	224.58
DAVIDSONVILLE	N3AKN	222.28	223.88
E. BALTIMORE	WR3AFI	222.24	223.84
N. BALTIMORE	N3IC	222.64	224.24
W. BALTIMORE	WA3DZZ	223.20	224.80
W. BALTIMORE	WR3AKN	223.34	224.94
WASHINGTON DC	W3NKF	222.90	224.50

440 MHZ

ANNAPOLIS	W3EAO	444.475	449.475
BALTIMORE	W3WCQ	439.25	426.25
BALTIMORE	K3SP	444.325	449.325
BALTIMORE	W3DID	448.40	443.40
BURTONSVILLE	WA3TKW	448.65	443.65
E. BALTIMORE	W3WCQ	426.25	1234.25
E. BALTIMORE	WR3AFI	444.55	449.55
FREDERICK	WA3CHI	443.75	448.75
FREDERICK	WR3ABL	444.80	449.80
GAITHERSBURG	WR3AKP	443.60	448.60
GLEN BURNIE	WA3MEJ	448.70	443.70
HARMANS	W3YYY	443.925	448.925
HAVRE DE GRACE	K3UAW	448.10	443.10
JESSUP	WA3DZD	449.10	444.10
LEXINGTON PARK	WA3UMY	448.05	443.05
ODENTON	WA3GPC	449.70	444.70
SILVER SPRING	WB3ARZ	448.45	443.45
UPPER MARLBORO	WB3IUT	448.30	443.30
W. BALTIMORE	WA3DZZ	448.35	443.35
W. BALTIMORE	WA3WLD	448.55	443.55
WASHINGTON DC	WA3KOK	444.975	449.975

10 METERS

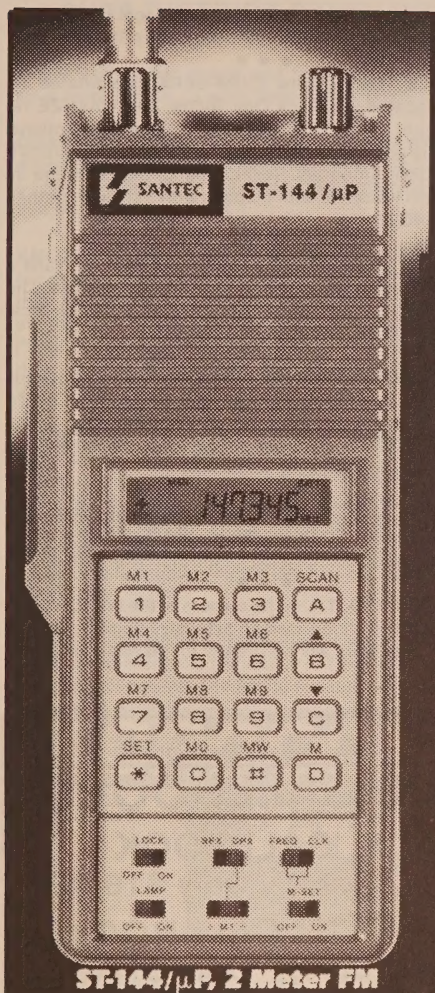
FREELAND	K3SP	29.52	29.62

6 METERS

WHEATON	WB3DBU	52.25	53.25

Repeater Index Credits:
Florida – The Florida Repeater Council
Alabama – W4IZI and Georgia Council
Md., Del., N. Va. – Gary Hendricksen
Eastern Kentucky – Terry West

This Issue of The REPEATER JOURNAL lists over 1,000 repeaters covering ten states and Eastern Kentucky. Our indexes are updated quarterly when possible with the gracious assistance of Frequency Coordinators and Repeater Councils representing States listed that are not a part of CVRA-SERA. With their valuable assistance, and the dilligence of our 5 Directors, the REPEATER JOURNAL presents to you the largest single updated listing of repeaters in the nation, second only to the ARRL Repeater Directory.



ST-144/μP, 2 Meter FM

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FEATURE	SANTEC ST-144	YAESU FT-208	KENWOOD TR-2500
Size (mm)	68 x 170 x 47	61 x 168 x 49	66 x 168 x 40
Weight with Batt.	600 gm	720 gm	540 gm
Readout	LCD (full 6 digits)	LCD (4 digits)	LCD (4 digits)
Memory Channels	10	10	10
Memory of Offsets	YES	NO	NO
Memory Backup	YES, Capacitance	Yes, Lithium Batt.	Yes, Lithium Batt.
Search Mode	YES	NO	NO
Step Size	5-100 kHz	5 or 10 kHz only	5-30 kHz
Battery	Quick Change Pack 500 ma-hr, 9.6 V	Quick Change Pack 450 ma-hr, 10.8 V	Slide-on Pack 400 ma-hr, 8.4 V
Frequency Coverage	142-148.995 Tx (149.995 optional) 142-149.995 Rx	143.5-148.495 Tx/Rx	143.9-148.995 Tx/Rx
Power (max)	3.5 W High 1.0 W Med 0.1 W Low	2.5 W High 0.2 W Low	2.5 W High
Priority	YES (in Mem/Scan)	Yes (Priority Ch.)	NO
Clock	YES	NO	NO
Computer Current Saver	YES (- 10 ma)	NO (20 ma)	NO (27 ma)
Display	6 Digits + Mem. #	4 Digits + Mem. #	4 Digits

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District Ramblings

SAURATOWN MT. (Winston-Salem) N.C.—The good news! We had hoped to have the 79-39 (sub band) machine in operation earlier this summer, but have been plagued by transmitter problems. Through Danny Hampton's (K4ITL) help we have a new GE transmitter and PA and should be on the air soon, full time. The Six-meter link is all checked out and ready to go and will be hooked in to the two-meter repeater. Now the great news: We now have a complete RCA 440 repeater which will be on the air as soon as we get a frequency coordinated and new crystals. It will be hooked into the linking system as soon as the 2-meter repeater is ready. (Don Edwards, WB4KQN)

• • •

HAYNESVILLE, VA.—The 93-33 WA4UAF repeater formerly located at Kilmarnock is now in Haynesville, 4 miles Northeast of Warsaw, 23 miles North of Kilmarnock. The antenna is located at the 325-foot level of a 400-foot tower. Coverage has been extended North of Tappahannock toward Fredericksburg, an area that has been void and also toward Richmond, while keeping the previous coverage to the South. (Sylvia Massie, KA3DTE)

• • •

VIKING MT., TN.—The 81-41 (sub band) WB4TUO went on the air in August from atop Viking Mountain with an elevation of about 5,000 feet. The GE Master Pro machine feeds a Super Stationmaster antenna with RF Technology duplexers. Coverage of the machine is good to a mobile for about 100 mile radius of Greeneville. A 220 and 440 repeater system is located at the site. Six meters is being considered. Owners are Jack Archer, WB4TUO, Alvin Harrison, KR4A and Herbert West, N4BHS.

• • •

CHARLOTTE, N.C.—The 99-39 repeater is still active in the Charlotte area. We inadvertently deleted it from the index due to incorrect information last issue. The machine has been purchased by WD4PLY and WD4LCF and is continuing under the new ownership with good coverage. (Jim, KA4RFA)

• • •

ROCK HILL, S.C.—The KA4RFA 440-mhz repeater has changed frequencies to be in line with the band plan. Jim reports he is now on the coordinated frequency of 449.75-444.75.

• • •

MORRISTOWN, TN.—The WD4RTT repeater sponsored by the Lakeway ARC has had some notable changes recently. The Motorola tube gear has retired in favor of a new Spectrum machine and emergency power was added. The equipment includes Phelps-Dodge duplexer, hard-line and commercial gain antenna. The club is presently considering adding autopatch facilities. (Sam, WB4HAP)

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MORGANTON-CHERRYVILLE, N.C.—WB4PML at Morganton and WB4UDS at Cherryville have swapped 220 mhz repeater frequencies. The Morganton machine is now running on 223.20-224.80 and Cherryville is on 223.36-224.96. The swap was made to eliminate some local image interferance on one of the machines. (Ken, WA4BVW)

• • •

KNOXVILLE, TN.—A new CVRA-SERA coordinated repeater is located on Black Oak Ridge. The WA4GZE repeater is on 77-37 (sub band) and uses conventional transceivers and a W.S. Eng. interface. The machine runs 9 watts and split antennas. Reliable handheld coverage includes North Knoxville with mobiles working much farther. (Steve, WA4GZE)

• • •

WHITEVILLE, N.C.—The Columbis County ARS plans a repeater for Whiteville on 81-21 in the near future. The K4MSD machine will fill a void in that area for local coverage. (Ken, WA4BVW)

• • •

WALNUT GROVE, TN.—Dick Jones has had to move his W4RJC Athens repeater from 67-27 (sub band) to 55-15 due to interference from a repeater in Georgia, which reportedly moved to a different site after the Athens repeater got on the air. (Sam, WB4HAP)

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CHARLOTTE, N.C.—W4BFB, The Mecklenburg ARS plans to put on a 2-meter RTTY machine soon. The frequency of 175-775 has been coordinated for the club. (Ken, WA4BVW)

• • •

MURFREESBORO, TN.—The owners of the WB4LHO 57-17 machine have announced an extensive upgrade of their equipment. Changes will be greatly increased transmitter

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CVRA DISTRICT RAMBLINGS

Continued From Page 32

height and higher power and multiple receivers. We will have more details as work progresses. (Tom, WD4KWP)

• • •

CHARLOTTE, N.C.—Jon Kennerly, KE4ZC will soon have a 6-meter repeater on in Charlotte. The 52.03-53.03 will join a long awaited 220-mhz machine to operate on 222.80-224.40. (Ken, WA4BVW)

• • •

KNOXVILLE, TN.—The 87-47 (sub) WB4GBI repeater expects to upgrade the machine from "tobegear" to a (get this) brand new G.E. Master II 100-watt continuous duty station with full metering and factory cabinet. Also Tim ("Bozo") plans a UHF repeater on the coordinated frequency of 449.70-444.70 for the Knoxville area. (Sam, WB4HAP)

• • •

MARYVILLE, TN.—George "Yeng" Shaver, K4HXD has been budy upgrading the 675-075 Knoxville autopatch machine. It should be back on the air by the time this gets in print. This work has put George behind on the new 10-meter machine planned for 29-52-29-62. George's work is worth waiting for, why take for instance his 34-94 is so popular, he lets the fan run on the transmitter 24 hours a day! (Sam, WB4HAP)

• • •

MORE N.C. REPEATERS—Bill Houser, WB4OKA has been coordinated the frequency of 75-35 (sub) and 222.64-224.24 and 449-80-444.80 for repeaters on Chambers Mt. at Canton. At MAYONDAN, N4GWZ plans a repeater on 55-15 (sub). DODIE ISLAND, Mike Goodwin, KE4PB, Mike Goodwin plans a repeater on 235-835. A new repeater for FAYETTEVILLE will be on 449.40-444.40 by Fred Ginn, KB4ZW. And finally at WAXHAW, Ron Durie plans a repeater on 295-895. These are all recent N.C. CVRA-SERA co-ordinates. (Ken, WA4BVW)

• • •

CHATTANOOGA, TN.—The Chattanooga Tri-State FM Assn. was able to assist during recent wide-spread flooding in their area. They helped evaluate individual cases of damage so that funds could be distributed fairly among those due to receive relief. Good work folks! (CTSFMA Newsletter)

THE PERFECT SQUELCH!

This past Labor Day morning, Gene Price, WA4YON, was heard on the 444-4 Oak Ridge repeater saying: "I'm outside by the pool and am clearing out so I can get all these bugs out of the water". A few seconds later he stepped backwards into the swimming pool fully clothed with S-4 in hip pocket. After climbing out and while discharging a few four-letter words, he held the S-4 up and watched the water run out. His XYL, Libby, having witnessed the whole mess from the kitchen window, yelled; "What's the matter Gene, didn't your rubber duck float?"

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WEST VIRGINIA NOTES

By: Ted Wolfe, WD4KHL

Thirteen amateurs participated in the search for a missing Clay County ginsing hunter following his disappearance on August 10.

The massive search by National Guardsmen, CAP units, family, friends, and volunteers in a remote area of Kanawha County failed to turn up any trace of the man. His body was finally discovered several days after the organized search effort ended. The discovery was made by another ginsing hunter.

Putnam County hams were alerted through the county's ARES net on Aug. 9 to assist officials when county communications failed due to an interruption in telephone service tying the system together. A command center was set up at the courthouse in Winfield and hams were sent to various police, fire, and ambulance stations. The service outage was short, but the incident again demonstrated the ability of hams to respond when needed.

Charleston area hams early in September provided communications support for a charity celebrity golf tournament and for a number of events during Sternwheel Regatta Week, including the 15-mile run and the riverboat races.

The Kanawha County ARES was activated July 17 following the discovery of a leak in a railroad tank car carrying liquid Hydrogen Chloride on a rail siding near the Union Carbide Technical Center of South Charleston.

The Red Cross requested operators at its headquarters and two evacuation centers. South Charleston police requested amateurs to patrol residential neighborhoods while they were engaged at the site of the emergency and on roadblock duties. Interstate 64, one of three main highways blocked off, was not reopened for traffic until the next afternoon. Red Cross traffic was handled over the WB8CQV 146.28/88 repeater in Charleston and the Security Patrol was coordinated through the WB8GDY 146.400/147.000 repeater at St. Albans.

The Kanawha County ARES net meets monthly. It is held the first Sunday of each month immediately following the regular 8:30 p.m. Sunday night Kanawha 2-meter net on the 146.88 machine.

Two new southern West Virginia repeaters came on line late in July. One was the Bolt Mountain WB8LVH 144.57/145.17 machine mentioned in the August Journal. The other was the WD8KWC 144.63/145.23 repeater on Blair Mountain. That machine is open for phone and radioteletype use. The odd-split Ward Rock machine 146.090/147.110 will be kept as a local Logan area repeater. The 146.37/97 repeater at Logan, off the air for six months or longer, is still looking for a new site.

Supporters of the K8SLI 147.87/27 repeater at Scott Depot put in several work days helping clear the site for a new Putnam County owned tower to be erected in the Coal Mountain area. The club will have a site on the tower along with a number of other services. The move is expected to improve the repeater's coverage.

The RTTY interest group in the lower Kanawha Valley has requested coordination of 147.96/36 for a new repeater. Also student amateurs at West Virginia Institute of Technology at Montgomery have requested coordination of 147.99/39 for a repeater on campus. It would serve portions of Kanawha and Fayette Counties.

WB8OEC hopes to have a new Coal Mountain area repeater operational before November. It has been coordinated for 147.775/715. The 144.51/145.11 pair has been requested for the Salt Rock, West Virginia, area (Cabell County).

When the Kanawha-Fayette-Clay Amateur Radio Association proposed a new 220 Mhz repeater for Lick Knob (site of the club's existing W8FG 144.87/145.47 repeater), they called a meeting of interested hams during the Jackson County hamfest at the airport near Ravenswood on Aug. 8.

Fifteen of the amateurs at the meeting pledged one-hundred dollars each to get the project underway. With most of the pledged money in hand shortly thereafter, the repeater, duplexers, and antenna were ordered. The club coordinated 223.14/224.74 for the machine and hopes to have it in operation by the time this issue of the Journal reaches you.

The Tri-County Amateur Radio Club held its annual picnic on Sunday, Aug. 1, at the Coal River area home of Dwight Cavender. About 40 people, including wives and children of club members, attended.

Dwight has a new call, KC8YU. He used to be WD4GRF.

Joe Roberts, KA8IBO, Oak Hill, President of the Plateau ARC, and Denise Campbell, KA8LSF, were wed on June 17. Denise is the daughter of Jobill Campbell, KA8CGU, Lansing, WV.

Dave Vest KZ4G, Flatwoods, the ARRL Section Communications Manager for Kentucky, recuperated this summer from a June heart attack.

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REPEATER INDEX COMPUTER PROGRAM NOW AVAILABLE

by Bill Lundy/KB4IZ

Being both a computer nut and a HAM . . .I had been wanting to put together a simple program that would list and print the CVRA Journal Repeater Listings. Never got around to it somehow until the other day I ran into another computer "Nut" (who is awaiting his Novice license at this writing) by the name of Fred Smith. Fred is a super whiz at writing programs and can whip them out in short order. I dabble a bit in it myself . . . having the computer set up on RTTY and using it both as a hobby and in my business. Collectively we put together the following program.

This program was written for the TRS-80 Model I & III and in addition will possibly run on the Apple as well. Not being familar with the Apple however, I can not say for sure.

It will give you a listing on the screen or give you a print out on your printer of all the repeaters listed in North Carolina or in any given city or location that you call for. If one was going from Wilmington to Asheville for example . . . he could run the program and ask for a listing of all the major cities in between those locations and the program **will** quickly give him the desired information either on the screen or print a copy allowing his departure being well informed on the two meter repeater information.

In listing the program all anyone has to do is type it into the memory and "SAVE" or "CSAVE" it. If you don't want to type the thing but still would like to have it; if you will send me a blank cassette or diskette and the necessary postage to return it to you — I'll be most happy to do so. If you would prefer send me $1.50 (to cover the cost of a cassette and postage) and I'll send it to you on a 500 Baud cassette or . . . send me $3.00 (to cover the cost of a diskette and postage) and I'll send it to you on a formatted diskette (no system).

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(Editor's Note: If you are the adventuresome type and would like to key in the program from hard copy, send me SASE with 20-cents postage affixed and we will mail you copies of the 5 page program . . . another service of the Repeater Journal and Bill Lundy.

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Georgia News

—Compiled by Lindsay Cleveland, W4IZI

ATLANTA—Dr. Bill McClatchey, KK4C (ex WB4DPS from Durham, N.C.) is now in the repeater business. He has one on 223.22-224.82 and a second one on 2-meters operating on 855-255. Both machines are on a 22-story building in Atlanta. The 220 machine is a homebrew rig, running to a DB-244 antenna. The 2-meter machine is an RCA-1000. Both have Micro Control Specialties controllers.

• • •

AUGUSTA—We would like to welcome another Georgia repeater into CVRA-SERA. N4BMA has signed up his 78-18 machine. He has also steered lots of his users to the Association booth at the Augusta Hamfest to become Associate Members.

• • •

ATHENS—And yet another Georgia Repeater! K4TQV on 147.375-147.975 makes the sixth repeater in the State to become a Full CVRA-SERA member. (Editor's note: Although Georgia is not a CVRA-SERA District, the Association has always welcomed repeater owners from States to join our organization.)

• • •

AROUND GEORGIA—We are seeing a few cases where repeaters are changing frequencies because of various problems and then finding the new frequency has another unexpected low activity repeater on or near the frequency, or in some cases, the new output frequency turns out to be another machines's input frequency since Georgia coordination had somewhat fallen by the wayside recently.

• • •

NEW FREQUENCY COORDINATOR—John Robertson, N4BGL has kindly volunteered to be the new Georgia Frequency Coordinator. The CVRA-SERA Directors in adjoining States will be working closely with John in any assistance he may need in border state coordination. Congratulations to John for stepping into the breach.

• • •

NEWS NOTE: Since CVRA-SERA now has a man on the scene, we will be listing the Georgia index in future issues of the Repeater Journal. We ask that it will be up to the "locals" to keep us informed of any corrections to the listings. Just drop a card or a radiogram to Lindsay, W4IZI (see page 2 for address).

• • •

CANTON—The new 67-27 (sub band) repeater is reported doing supurb. The machine sponsored by the Cherokee Radio Group, and the Georgia State Highway Patrol Radio Club is on Pine Log Mt. at 2,700 feet. The repeater antenna is on a 60-foot tower and is fed by a G.E. Master at 30-watts. Mobile coverage around the repeater is about 100 miles in all directions.

• • •

TO OUR GEORGIA HAM FRIENDS—Lindsay, W4IZI is making himself available as much as possible, attending many hamfests within range of Stone Mt. and passing out information as requested about CVRA-SERA. If you have any questions about CVRA-SERA, contact Lindsay, he'll be glad to help. In the meantime, our Editor is working on a long-awaited information packet about our organization. Any Georgia news, be sure to send it to Lindsay for the Repeater Journal. We also have included all known Georgia hamfest dates in our "calendar" in the back of this book.

AMATEURS AND HOT AIR BALLOONS

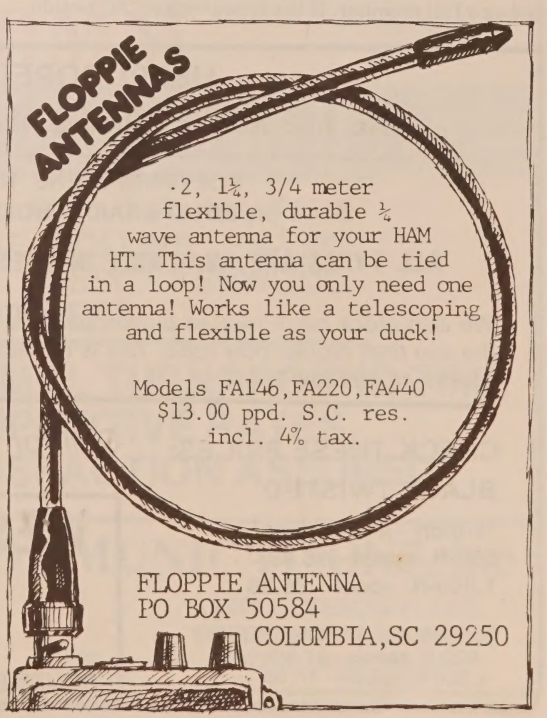
—by Dot Bedford, K4AOH

The weekend of July 4th was "Freedom Weekend Aloft" hot air balloon festival in Greenville, S.C.

There were approximately 220 hot air balloons in the largest festival held East of the Mississippi River.

Some 40 Amateur radio operators were involved in furnishing communications for the affair. Their presence with instant communications made a tough situation much easier to handle, coordinating the festival and its hundreds of participants.

The ham operators began the day at 4 a.m. each morning and were on duty all day both days. The command post was manned with K4AOH, Dot Bedford and NZ4P, Ed Grant. Coordinators were K4,AOH, WD4BJY, NZ4P, ND4N and K4SUG. It was tough work, but the Amateurs really enjoyed the sights and being able to assist.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REPEATER RENEWAL TIME

All Full Member repeater memberships expire December 31, 1982. Renewal notices to all Full Members of record for 1982 will be mailed out in late November.

Full Members are urged to complete the application and mail it in as soon as possible to be assured of getting credit in the February Journal.

As in past years, all Full Member repeaters who renew, or join and their application is received PRIOR TO DECEMBER 31, will be listed on our "Honor Roll" to be published in the February Journal.

Anyone owning a repeater who is not a 1982 member and would like to join, may send their name and address to the Journal Editor prior to November 15th and we will send them an application in plenty of time to join before December 31 and qualify for the honor roll.

Deadline for renewing or joining and being listed as a full member repeater in the February Journal is JANUARY 15. Our computer update listing will close on that date.

All repeater users are urged to check the Journal listing this issue and see if their home repeater is listed as a full member. If the repeater has "N" beside it, they are not members. Urge your repeater owner to support CVRA-SERA as you do, get him to write for an application and join before December 31.

Let's get all those ugly "N's" off the list in February.

WILL NORTH CAROLINA WIN AGAIN????

Each year the Repeater Journal lists repeaters by State in our "Honor Roll" who are "Early Bird" joiners. To be eligible for the honor roll, repeaters must join as full members PRIOR TO DEC. 31.

Each year North Carolina runs away for the honors of having not only the most renewing or joining but the largest PERCENTAGE signing up before the deadline.

Will there be a new champion in 1983, it's up to you guys . . . let's get those Full Memberships in by December 31.

If you were not a member in 1982, send your name and address and we'll send you a Full Membership application in late November when we send renewal notices out to all the 1982 Full Members.

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FALL MEETING MINUTES

The annual meeting of the CVRA-Southeastern Repeater Assn. was held Sept. 4, 1982 at the Governer's Inn in Shelby, N.C. President Don Morris called the dinner meeting to order.

A detailed treasurer's report was submitted by Ray Adams, N4BAQ, showing a balance as of August 31, 1982 of $2,443.86. A Update report on the C3 tax status was also given by Ray, all details still not finalized.

A proposal to raise the associate dues from $3.00 per year to $4.00 per year was presented by Ray Adams. The motion carried, dues are now $4.00 per year.

A discussion concerning the purchase of a copy machine for Wayne Williams K4MOB, to handle the printing of the journal was also submitted by Ray Adams. After some discussion the motion was made – carried that Don Morris and Ray Adams authorize the purchase of the copier not to exceed $3,000.00.

Report on the membership drive orginating from the Santec give-away looks very favorable for the Assoc. 32% new membership enteries.

Discussion on the time limit of a frequency coordinated to a new repeater and what to do if the repeater was not on the air within the time limit (90 days), subject to renewal, was discussed at great length. If the frequency is not put on the air within the 90 day period or a renewal form received, the frequency will then be issued to someone else.

A talk on interference from cable TV was given by FCC representative Jerry Freeman.

Wayne K4MOB, announced that beginning with the November issue the size of the journal will be changed to a larger size. The new size will enable the advertizers to use the same ad format in the journal as they use in QST, CQ Etc.

A motion on moving the first meeting of the year forward and to a different location was brought before the board. A motion for Sam Kirby & Ken Woodward to look into a more appropriate place and time was carried.

The time for nominating new Directors and officers is upon us again, forms will be available in the Nov. issue of the journal.

Our congratulations and thanks for a job very well done, goes to Wayne Williams, a job well done on the journal.

Respectfully submitted,
Maxine Barrett, N4ECA
Secretary

Coming Events

1982 CVRA-SERA CALENDAR

NOVEMBER 1982

27-28 .....GBO Hamfest, GREENSBORO, N.C.

1983 CVRA-SERA CALENDAR

JANUARY

16.....Frostfest IV Hamfest, RICHMOND, VA.

FEBRUARY

13* .....Hamfest, FAYETTEVILLE, W.VA.
20.....Winter Hamfest, ELKIN, N.C.
27 .....WINTERFEST, VIENNA, VA.

MARCH

19-20 .....Roa. Div. ARRL Conv., CHARLOTTE, N.C.
19-20.....Hamfest, ORLANDO, FLA.
26-27 .....Ga. State ARRL Conv., COLUMBUS, GA.

APRIL

2-3* .....Hamfest, OAK RIDGE, TN.
17.....RARS Hamfest, RALEIGH, N.C.
17.....Kennehoochee Hamfest, KENNESAW, GA.
22-24* .....Dayton Hamvention, DAYTON, OH.
???.....Hamfest, ALBANY, GA.
30-May 1 .....Hamfest, GREENVILLE, S.C.
30-May 1* ....Tri-Cities Hamfest JC/KINGSPORT, TN.

MAY

14* .....DFMA Hamfest, DURHAM, N.C.
21* .....Gaston Cty. Hamfest, GASTONIA, N.C.
21-22* .....Hamfest, KNOXVILLE, TN.
29* .....RVARC Hamfest, ROANOKE, VA.
29*.....Md. FM Assn. Hamfest, HARMANS, MD.

JUNE

5.....Ole Va. Hams Hamfest, MANASSAS, VA.
5* .....Tri-State ARA Hamfest, HUNTINGTON, W.VA.
18-19 .....Atlanta Hamvention, ATLANTA, GA.

JULY

2-3 .....W.Va. State Conv., JACKSON'S MILL, W.VA.
16*.....Summer Swapfest, CARY, N.C.
24 .....TSRAC Hamfest, WHEELING, W.VA.
25* .....BRATS Hamfest, BALTIMORE, MD.
24*.....Hamfest, NASHVILLE, TN.
31* .....Jackson Cty. Hamfest, RIPLEY, W.VA.

AUGUST

7 ....SVARC Hamfest (Winchester), BERRYVILLE, VA.
13-14.....Delta Div. ARRL Conv., SHREVEPORT, LA.
21*.....East River ARC Hamfest, BLUEFIELD, W.VA.
28*.....Hamfest, MORGANTOWN, W.VA.

SEPTEMBER

3-4* .....Hamfest, SHELBY, N.C.
10-11 ...Central Ga. Hamfest, WARNER ROBBINS, GA.
11* .....Hamfest, GAITHERSBURG, MD.
17* .....WCARS II Swapfest, GREENWOOD, S.C.
18* .....Hamfest, CINCINNATTI, OH.
25 .....Hamfest, GAINESVILLE, GA.

OCTOBER

2* .....Hamfest, ROCK HILL, S.C.
2*.....Hamfest, MAYESVILLE, N.C.
2 .....Hamfest, ROME, GA.
7-9 .....ARRL Nat'l Convention, HOUSTON, TX.
8*.....Autumnfest, ASHEVILLE, N.C.
8-9 .....Hamfest, VA. BEACH, VA.
15-16* .....Hamfest, CLEARWATER, FLA.
22-23* .....Hamfest, CHATTANOOGA, TN.
22-23* .....ARCS Hamfest, SAVANNAH, GA.

NOVEMBER

5-6* .....Hamfest, STONE MT., GA.
6*.....Hamfest, CONCORD, N.C.
26-27*.....Hamfest, GREENSBORO, N.C.

(Editor's Note:) The REPEATER JOURNAL CALENDAR is published each issue as a public service to our readers. We wish to thank sponsoring clubs for sending in their hamfest dates. An extra thanks goes to Gay Milius, W4UG, Roanoke Director, ARRL for his assistance and coordination with us in getting hamfest dates.

NOTE: Hamfests marked with an asterisk are TENTATIVELY scheduled dates only, usually based on the date of their 1982 show. Clubs sponsoring hamfests should get their confirmed date as soon as available to the Repeater Journal Editor so we will be up-to-date in future issues. Send Hamfest dates to: REPEATER JOURNAL EDITOR, WAYNE C. WILLIAMS, K4MOB, 600 LAKEDALE ROAD, COLFAX, N.C. 27235. The Journal cannot assume responsibility for incorrect listings unless the correct dates are submitted in writing.

NEED JOURNALS TO SEND TO FRIENDS

If you would like to have an extra Journal to send to a friend. Extra copies may be obtained from our booths at Hamfests, or you may write the Repeater Journal Editor. Enclose $1.50 for one Journal, $2.50 for two Journals or $3.50 for three copies. This includes 71-cents for 3rd class postage. We cannot send free post paid Journals, the cost is prohibitive. Normal cover price for a Repeater Journal is $1.25 each.

If you wish to send a February Repeater Journal to a friend, send his name and address prior to January 1st so we can make a label and include it in our bulk mailing. Cost then would be $1.00 each, no postage. Address must arrive prior to mailing deadline for free postage, however. Send to Journal Editor.

A TWO-METER-FM BROADCAST-FM DIPLEXER

—by R. E. Fisher, W2CQH

This diplexer allows simultaneous operation of a 2M. FM rig. and 88-108. MHz broadcast FM receiver from the same automobile whip antenna. The isolation is so good (50 dB.) that the broadcast FM receiver is not blocked when transmitting 25 watts on 2 meters. In Figure 1, the 28 inch whip antenna, which is quarter-wave resonant at 100 MHz, drives the broadcast FM receiver through the coax.) from a commerical 28 inch BC FM whip antenna.

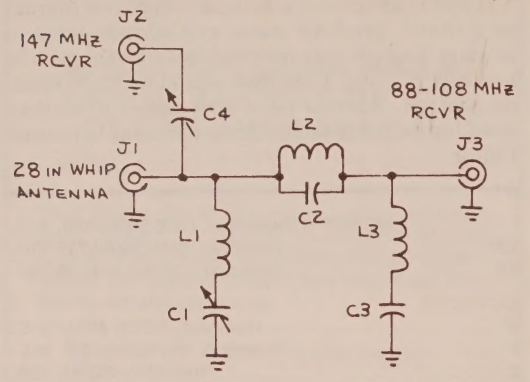

FIG. 1 DIPLEXER CIRCUIT

147 MHz bandstop filter comprised of the series trap L2C2 and shunt trap L3, C3. At 147 MHz the non-resonant (3/8 wave) antenna is impedance matched to the 50 ohm 147 MHz FM transceiver by C1, L1 and C4.

Figure 2 shows the physical layout of the home-brew whip antenna and attached diplexer. L1and L2 **must** be air-wound, but L3 can be slug tuned. C2, the weakest component, should consist of two 18 pf dipped mica capacitors in parallel.

Circuit alignment should begin by using a grid dip meter to resonate each of the fix-tuned traps L2, C2 and L3, C3 to 147 MHz. The tunable matching network L1, C1 should initially resonate near 120 MHz. Then, with the antenna and diplexer mounted in place, C1 and C4 should be adjusted until a low VSWR is measured at 147 MHz looking into J2.

Note that the 147 MHz circuits in the diplexer have been designed to impedance match a **directly attached** 28 inch whip antenna. Thus the diplexer-antenna assembly should be mounted on the rear fender/deck of an automobile where the diplexer box is accessible. The intrepid experimenter can probably get acceptable 2 meter performance if the diplexer is placed one half wave length (26 inch in

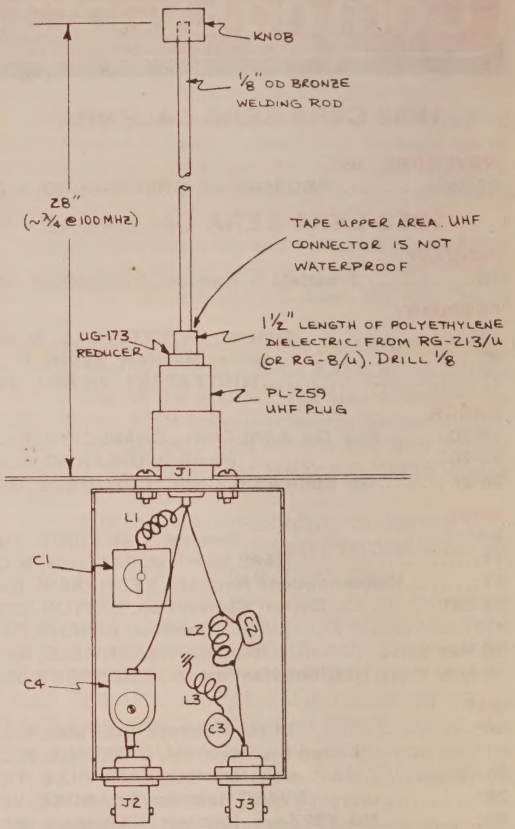

FIG. 2 ANTENNA/DIPLEXER DETAIL

MEASURED DIPLEXER PERFORMANCE

1. Loss from J1 to J2 = 0.5dB at 145 — 148 Mhz (including dummy antenna).
2. Loss from J1 to J3 — 0.8dB at 88 — 108 MHz (50 ohm source to 50 ohm load).
3. Loss from J1 to J3 > 50dB at 147 MHz.
4. Max. power = 25 watts.

PARTS LIST

J1	UHF Jack (SO-239)
J2, J3	BNC (or UHF) Jack (UG-625B/U)
C1	1-10 pf Air Variable Capacitor. E.F. Johnson Type 189-563-1 or equivalent (3 pf nominal setting)
C2	36 of Dipped Mica Capacitor (Two 18 pf in parallel)
C3	6.2 pf Capacitor
L1	0.4 uh Coil; 1Ø T, No. 18 AWG; 1/4 inch ID; 1/2 inch long
L2	0.033 uh Coil; 2T, No. 18 AWG; 1/4 inch ID
Misc.	1-5/8 X 2-1/8 X 3-1/4 Minibox (Bud CU-3001A), Whip antenna components, hardware

CLASSIFIED

If you have equipment you would like to swap, sell, buy or trade you're invited to send us your want ads. Mail them to our Sales Manager listed on page 1 of the Journal. Ads are not limited to Amateur Radio items.

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Ads must be submitted 30 days prior to publication. The CVRA assumes no responsibility as to the accuracy of description of equipment or its condition.

ATTENTION VHFers: 6M/2M Kilowatt SSB/CW/FM amplifier. DENTRON MLA-2500-VHF, two 4CX350A finals, AC/PS. 50-54 mhz, 142-150 mhz. $1095.00 MLX-MINI 6M, transceiver 25 watts SSB/CW, LED readout – $225.00 EVERHART ELECTRONICS, POST OFFICE BOX 41, LEXINGTON, N.C. 27292.

• • •

FOR SALE: Microvolt Signal Generators, Boonton/HP No. 202-H, 54-216 mhz., AM, FM, CW & Pulse mod., 2 each w/manual. GC, both for $295.00. W4JGO, SALEM, VA. (703) 389-3356.

• • •

NEW DENTRON HF Amplifiers: 160-15M, including WARC bands. KW's with three 3-500-Z's – $2695.00; two 3-500-Z's – $1195.00; one 3-500-Z – $649.00. With AC/PS. American Made! EVERHART ELECTRONICS, POST OFFICE BOX 41, LEXINGTON, N.C. 27292.

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1983 CALLBOOKS – Goooood Prices! Available early December. See our ad this issue. WILLIAMS RADIO SALES, COLFAX, N.C. (919) 993-5881 Noon to 10 p.m. Ship UPS or UPS-COD.

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FOR SALE: Two Spec Comm SCR-1000 repeaters. Extra set RX, TX and Amp boards. Asking $600-$700 each. Price negotiable. PAUL WATKINS, W4FDK, RT. 11, BOX 536, GAINESVILLE, GA. 30501 (404) 536-8280.

• • •

ESTATE SALE: Remaining equipment of the late John Sabet, WB4HGS. Drake T4X transmitter R4A receiver, AC4 P.S. and MN4 Speaker cabinet. Good condition with manuals, $425.00. Johnson Matchbox-write. HARWOOD WEST, WB4RLO, RT. 6, BOX 529-A, GREENSBORO, N.C. 27405. NC Call – 1-800-334-4252.

• • •

NEW DENTRON MLX-2500 Transceiver 160-10M, with built-in AC/PS. 500 watts PEP SSB, 400 watts CW. Solid state receiver, 2-6MJ6 tubes transmitter output. $495.00. EVERHART ELECTRONICS, POST OFFICE BOX 41, LEXINGTON, N.C. 27292.

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RJ11-82

THOSE WHO REMEMBER W4HPL

The Cookeville Repeater Association would like to remember Bill Thompson, W4HPL, originator and charter member of the Cookeville Repeater Association. Bill died recently still actively serving in our club as vice-president, at the age of 78.

W4HPL was active on 6-meters for many years. After his retirement from Tennessee Tech, he upgraded and became active on 80-meters. As 2-meters came of age, he was active on many repeaters in the middle Tennessee area.

Bill enjoyed several hobbies such as gardening, beekeeping, flying and Weather observation which were topics of his QSO's. He was an excellent craftsman and generously donated his time and skills for the construction of our repeater.

When we called W4HPL on the machine, he was always there. Now only his memory is with us, as it will always be. (Danny WA4PPL, Cookeville Repeater Assn.)

LAUGH WITH WD8PPI & TSRAC-BNT

Bulldozer: Someone who can sleep through a political speech. **Old-Timer:** Not only was it colder in my day, sonny, but the snow was whiter. **Wife:** I didn't say your tie was loud, I just asked if it had a volume control.

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Let's look at some of the features . . .

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- The new KDK 4 bit microprocessor chip has in-house developed software which makes all these new features possible. Plug in modules are used for CTCSS tone and diode matrix duplexing.
- We gave it a very heavy textured paint finish on the case and mounting bracket that is highly resistant to scratching! No more micro-thin paint finishes!
- Modern styled front panel with dials intelligently arranged so you can best utilize the multi-function, easy to handle controls.
- Good audio with the famous KDK audio output capability of 1.5 watts . . . you can't blow out our audio IC!
- RF power is a good, clean no spurious signal of 25 watts on high and 5 watts (adjustable) on low.
- Frequency coverage 143.005 - 148.995 mhz. S/N better than 35 db at 1 uv input. Better than .2 uv at 12 db SINAD. Squelch sensitivity better than .15 uv. Bandwidth at −6db: ±6khz, at −60db: ±16khz. Image ratio better than 70db. Double superhetrodyne. Transmitter uses variable reactance frequency modulation with maximum deviation set at ±5khz.
- Nicads for memory retention built in, nothing extra to buy. Disconnect the FM2030 from the power source and the memories remain!

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Includes Tone Pad Microphone and all accessories.

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- Easy to use mobile mount with instant disconnect knobs for fast, simple removal. DC Cable and mounting hardware, spare fuse, external speaker plug and complete simplified instruction book includes circuit diagrams and even complete alignment instructions! No extras to purchase!
- Control functions: Select memories, show memory channel number, or select memories and show frequency of channel, or dial frequencies with two speed selectable control. Instant choice of either 5 or 100 khz tuning steps. Programmable band scan limits and memory scan.
- Frequency shown in 5 bright LED digits. LED indicator shows when signal is received (unsquelched), LED indicator shows transmit.
- Modern LED bar meter shows signal strength of received signal and on transmit shows relative output power.
- Microphone includes tone pad, and up and down buttons to change dial frequency or memory channels.
- A standard microphone with up-down buttons only is available separately.
- The FM 2030 is basically as easy to use as a crystal receiver with rotary switch frequency selection for full "eyes-on-the-road" mobile operation.
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